

Original Ticket# 985957

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 11/29/2017 Payment Type Credit Account

Vehicle# 325-20R Container

Volume 20.0

Manual Ticket#

Driver Chec k#

Billing # 0004289

State Waste Code

Manifest

Hauling Ticket#

Gen EPA ID

Destination

Grid

Route

PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 11/29/2017 07:20:26 Inbound 1 Out 11/29/2017 07:20:26

Scale

Operator cconnelly cconnelly Inbound

Gross Tare

67000 lb 40620 15

pub life

Net 26380 15 Tons 13.19

Comments

Prod	luct	LD%	Qty	MOU	Rate	Tax	Amount	Origin
1	Declass Soil-Tons-	100	13.19	Tons	in 1944 pains drive along their trade state, south trade state, bodd early retri	TOTAL SPEED ARTER SPEED NOTE AND ASSESS CAME SAME	with the disc paid have some some some spice while desce to	COOK



Industrial Waste Tracking Receipt (Non-Special) Profile Number: 613405IL Expiration Date: 12/10/17

2 Copies needed with each driver on their 1st load of each day

Generator Information

Section A

Generator Name: H. Kramer & Co	
Technical Contact and Phone: Josh Bernat 708-458-6868	
Street Address: 1345 W 21st St Chicago, IL 60608	
County: Cook	
On Site Contact: Walt Pochron 312-226-6600	
Waste Name: Treated Lead Impacted Soil Containing PCB's	
Volume/Number of Drums:	
Special Conditions:	
NO Generator Signature Required Section B =TRANSPORTERINFORMATION =	
Transporter: Disposall	
Driver Signature: Replace	
Truck Number: 325 20 yard Box Date: 11-29-17	
Section C DISPOSAL SITE INFORMATION	
Site Name: Laraway RDF IEPA ID Number: 1970450002	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Authorized Signature Date (MM/DD/YY)	4
Load 1 Load 2 Load 3 Load 4 I	oad 5



Original Ticket# 988543

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL Ticket Date 12/04/2017 Vehicle# 325-20R

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route

State Waste Code Manifest

Destination PO

Profile Generator

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS) 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 12/04/2017 06:58:54 Out 12/04/2017 06:58:54

Scale Inbound 1

Operator cconnelly cconnelly

Inbound

Tare Net Tons

Gross

68500 1b 40620 lb 27880 1b 13.94

Comments

Container

Gen EPA ID

Billing # 0004289

Driver

Check株

Grid

Produ	ct	most third leave there again from the case of the case and	LD%	Oty	UOM	Rate	Tax	Amount	Origin
1 1	Declass	Soil-Tons-	100	13.94	Tons	ne bank many nadry salah salah yank disej dana bugi, jind dalah sana jal	to princi passe score essay tenne biori valor date	a parent weight, school destro. Amont benefit from States & tast height speed 1480-1500	СООК



Industrial Waste Tracking Receipt (Non-Special) Profile Number: 613405IL Expiration Date: 12/10/17

2 Copies needed with each driver on their 1st load of each day

Generator Name: H. Krame: Technical Contact and Phone: Street Address: 1345 W 21 st St County: Cook On Site Contact: Walt Pochron	Josh Bernat 708-45			
Street Address: 1345 W 21st St				
Street Address: 1345 W 21st St				
County: Cook	7.00			
On Site Contact: Walt Pochron				
	1.312-226-6600			
Waste Name: Treated Lead Im		ing PCR's		- 1
olume/Number of Drums:		8		
Special Conditions:	7/5			
ransporter: DISPOS river Signature: Poplaruck Number: 325	ALC 20 yard Box		17	3,
NT T	ISBOSAVESHIE IV	FORMATION - :		
thorized Signature		Date (MM/DD/YY)	-	
ad 1 Load 2	Load 3	Load 4	Load 5	



Original Ticket# 990500

Bustomer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 12/06/2017

Vehicle# 325-20R Container

Gen EPA ID

Billing # 0004289

Volume 20.0

Payment Type Credit Account Manual Ticket#

Hauling Ticket# Route

State Waste Code Manifest 1

Grid

Driver

Check#

Destination

PO

In

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator

117- H KRAMER AND COMPANY H KRAMER & COMPANY

Time

12/06/2017 08:37:13

Scale Inbound 2

Operator inyland

Inbound

Gross Tare

67080 1b 40620 1b

Out 12/06/2017 08:37:13

jhyland

Net Tons 26460 lb 13.23

Comments

Prod	uct	LD%	Qty	MOU	Rate	Tax	Amount	Origin
regin parel bases made	species and their series dente grade price mine from security and good grade away signs deltar allow using an			strick across breaks take on coming wants	a number of the comment of the comme	s plante antique attents names applie hatter service author names	Sinche france suffere states. Of one objects and 15° question belong to dead whose the	and were detail after these steels design days these days are given to the
1	Declass Soil-Tons-	100	13.23	Tons				COOK



Industrial Waste Tracking Receipt (Non-Special) Profile Number: 613405IL Expiration Date: 12/10/17

2 Copies needed with each driver on their 1st load of each day

	Generator Information	
Generator Name: H. Kr	amer & Co	
Technical Contact and Ph	one: Josh Bernat 708-458-6868	
Street Address: 1345 W 2		
County: Cook		
On Site Contact: Walt Poc	hron 312-226-6600	
Waste Name: Treated Lead	d Impacted Soil Containing PCB's	V
Volume/Number of Drums		3
Special Conditions:	10/4	
Transporter: DISPO Priver Signature: Rap Pruck Number: 325	DEFENSION PROPERTY DATE: 12-6-1	7
		The state of the s
te Name: Laraway RDF	DISPOSAL SHIE INFORMATION IEPA ID Number: 1970450002	



Original Ticket# 992436

* Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL Vehicle# 325-20R Volume 20.0

Ticket Date 12/08/2017

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code Manifest 1

Destination FO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING FCRS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 12/08/2017 08:54:24 Inbound 1 Out 12/08/2017 08:54:24

Scale

Operator cconnelly cconnelly

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

Inbound Gross

66940 lb Tare 40620 1b Net Tons

59350 19 13.16

Comments

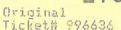
Product LD% Oty UOM Rate Tax Amount Origin Declass Soil-Tons- 100 13.16 Tons COOK



Industrial Waste Tracking Receipt (Non-Special) Profile Number: 613405IL Expiration Date: 12/10/17

2 Copies needed with each driver on their 1st load of each day

Section A	Generator Information	
Generator Name: H. Krame	er & Co	de la constantina del constantina de la constantina de la constantina del constantina de la constantin
Technical Contact and Phone	: Josh Bernat 708-458-6868	
Street Address: 1345 W 21st S		
County: Cook		
On Site Contact: Walt Pochro	n 312-226-6600	
	pacted Soil Containing PCB's	λ.
Volume/Number of Drums:		
Special Conditions:)÷·	
ransporter: DISPOS	RANSPORMERANEORMAGNONS	
river Signature:	4 Jenno	
ruck Number: 325	20 yard 80 x Date: 12-8-17	3
4- NT	ISPOSAL SITUINFORMATION: EPA ID Number: 1970450002	
Diguitui C	Date (MM/DD/YY)	
ad 1 Load 2	Load 3 Load 4	Load 5
		Loud J



Volume 20.0



Laraway RDF 21233 W. Laraway Rd Joliet, IL, 60436 Phs 815 727 6148

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 12/15/2017

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route

State Waste Code Manifest 1

Destination FO

Frofile Generator

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 12/15/2017 10:48:03 Out 12/15/2017 10:48:03

Scale Inbound 3

Operator ibriel ibriel * Manual Weight Inbound

0004289

68100 1b* Gross Tare 40620 1b* 27480 lb Net 13.74 Tons

Comments

Vehicle# 325-20R

Container

Gen EPA ID

Driver

Check# Billing #

Grid

Produ	ıct		LD%	Oty	MOU	Rate	Tax	Amount	Origin
1417 1985 New 2007 W		no start along park pass latter and called start and a park, or							
1	Declass	Soil-Tons-	100	13.74	Tons				соок



Industrial Waste Tracking Receipt (Non-Special) Profile Number: 613405IL Expiration Date: 12/10/17

2 Copies needed with each driver on their 1st load of each day

Section A	Générator Info	mation	and the same to	Construction of the care	
Generator Name: H. Kr.	amer & Co			·	
Technical Contact and Ph	one: Josh Bernat 708-4	158-6868			
Street Address: 1345 W 2					
County: Cook					
On Site Contact: Walt Poc	hron 312-226-6600				
Waste Name: Treated Lead		ning PCB's			7
olume/Number of Drums:		B			
pecial Conditions:	(50)				
ransporter: DISP river Signature: Rep ruck Number: 325	ball for				4 33
e Name: <u>Laraway RDF</u>	DISPOSAL STEELIN	S. S		Ŷ	
thorized Signature		Date (MM/DD/YY)	-	
Load 2	Load 3	Load	4	Load 5	
16100#5					



Original Ticket# 997921

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL Vehicle# 323-20R

Ticket Date 12/19/2017

Payment Type Credit Account

Manual Ticket# Hauling Ticket# Route

State Waste Code

Manifest Destination

Profile

6134051L (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 12/19/2017 09:28:55 Inbound 2 Out 12/19/2017 10:05:12 Outbound

Scale

Operator jhyland cconnelly

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

Inbound Gross

71220 16 Tare 40160 lb Net 31060 lb Tons 15.53

Comments

Proc	iuct		LD%	Qty	UOM	Rate	Tax	Amount	Origin
	and the party and the party and the party and	special bearing special reason and a princip princip before person where the	-		-				
1	Deel	C-11-T						to price addle more despt prove global whole more surprised to come of	and have make been done then been been been and been made and
1	Derige	Soil-Tons-	100	15.53	Tons				COOK
									COUR



Industrial Waste Tracking Receipt (Non-Special) Profile Number: 613405IL Expiration Date: 12/18/2018

2 Copies needed with each driver on their 1st load of each day

Generator in	normation_
Generator Name: H. Kramer & Co	
Technical Contact and Phone: Josh Bernat 7	08-458-6868
Street Address: 1345 W 21st St Chicago, IL 6	50608
County: Cook	
On Site Contact: Walt Pochron 312-226-6600	
Waste Name: Treated Lead Impacted Soil Co	ontaining PCB's
Volume/Number of Drums:	
Special Conditions:	
NO Generator Signature Required	
	ER INFORMATION
Transporter:	
Driver Signature:	3 Date: 12-19-17
Section C DISPOSAL SI	TE INFORMATION
Site Name: Laraway RDF IEPA ID Num	nber: <u>1970450002</u>
Authorized Signature	Date (MM/DD/YY)
Load 2 L	oad 3 Load 4 Load 5



Original Ticket# 1032003

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 04/18/2018

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code

Manifest

Destination

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 04/18/2018 08:22:28 Inbound 1 cconnelly Dut 04/18/2018 08:22:28

Scale

Operator cconnelly

Grid

Vehicle# 323-20R

Billing # 0004289

Container

Gen EPA ID

Driver

Check#

Inbound Gross

69840 1b Tare 40160 lb Net 29680 1b Tons 14.84

Comments

Produ	ıct		LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Declass	Soil-Tons-	100	14.84	Tons	ment and more have pather after announced facility from	were place total value most some some south mind of	tind army family space above down, while more space (space above and a	COOK



Original Ticket# 1033160

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 04/20/2018

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code

Manifest 1 Destination

PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 04/20/2018 08:17:42 Inbound 2 Out 04/20/2018 08:17:42

Scale

Operator cconnelly cconnelly

Container

Gen EPA ID

Driver

Check#

Grid

Inbound Gross

Vehicle# 323-20R

Billing # 0004289

Tare Net Tons 65740 1b 40160 lb 25580 1b

12.79

Comments

Froduct

1 Declass Soil-Tons- 100 12.79 Tons

LD% Qty UOM Rate Tax Amount Origin

COOK



Original Ticket# 1034605

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 04/24/2018

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code Manifest 1

Time

Destination

PO

Comments

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Out 04/24/2018 08:30:20

Scale

In 04/24/2018 08:30:20 Inbound 1 cconnelly

Operator

Grid

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

cconnelly

Inbound Gross

Vehicle# 323-20R Volume 20.0

Tare Net

30400 lb Tons 15.20

Product

LD% Qty UOM Rate Tax Amount Origin

70560 15

40160 lb

Declass Soil-Tons- 100 15.20 Tons



Original Ticket# 1035962

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL Vehicle# 323-20R

Ticket Date 04/26/2018 Payment Type Credit Account

Container Driver

Check#

Billing # 0004289

Gen EPA ID

State Waste Code Manifest 1

Manual Ticket#

Hauling Ticket#

Destination

Grid

Generator

Route

PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 04/26/2018 08:45:43 Out 04/26/2018 08:45:43

Scale Inbound 1

Operator jhyland ____ jhyland

Inbound

Gross 65760 1b Tare 40160 lb Net 25600 1b

Tons

12.80

Comments

roduct		LD%	Qty	MOU	Rate	Tax	Amount	Origin
ment mad been been olde else stoo live bear also mad a		et eres inne moe sere een een .					men pera tank pera tana anna anna na t-abet, sana anti-anna an	
Declass	Soil-Tons-	100	12.80	Tons				COOK



Original Ticket# 1037089

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Vehicle# 323-20R Volume 20.0

Ticket Date 04/30/2018 Payment Type Credit Account

Container Driver Check#

Manual Ticket# Hauling Ticket#

Billing # 0004289

Route State Waste Code

Gen EPA ID

Manifest 1 Destination

Grid

P0 Profile

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 04/30/2018 07:37:48 Inbound 2 Out 04/30/2018 07:37:48

Scale

Operator jhyland jhyland

Intound

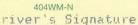
66820 1b Gross Tare 40160 15 26660 1b

Net Tons

13.33

Comments

Frod	uct	LD%	Qty	HOU	Rate	Tax	Amount	. 0	rigin	
1	Declass Soil-Tons-	100	13.33	Tons	and here you may the one that pay due one who were	AND DESCRIPTION OF THE RESERVE OF THE SECOND	the one and the test that you are not used	CO	DK	r dans





Laraway RDF

21233 W. Laraway Rd Joliet, IL, 50435 Ph: 815 727 6148

Ticket# 1042278

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 05/10/2018

Vehicle# 323-20R

Volume 20.0

Payment Type Credit Account Manual Ticket#

Container Driver

Hauling Ticket#

Check#

Billing # 0004289

Route State Waste Code

Gen EPA ID

Manifest 1

Destination

Grid

P()

Frofile

613405IL (TREATED LEAD IMPACTED SUIL CONTAINING FORS) Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Scale

Operator

Inbound Gross 66440 1b

In 05/10/2018 08:45:13 Out 05/10/2018 08:45:13

Inbound 4

knickleski

Tare

40160 lb

knickleski

Net Tons 26280 1b 13.14

Comments

Fro	duct	LD%	Qty	MOU	Rate	Tax	Amount	Origin
	THE GOLD THE SHE THE SHE THE SHE THE SECTION SHE					-	THE PERSON NAMED AND ADDRESS OF THE PARTY OF	were have been been been paint own made year over made year own paint
1	Declass Soil-Tons	- 100	13.14	Tons				СООК



Original Ticket# 1042844

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 05/11/2018 Vehicle# 323-20R

Payment Type Credit Account Contain
Manual Ticket# Driver
Hauling Ticket# Check#

Billing # 0004289

Gen EPA II

Brid

Profile

Destination

State Waste Code

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCRS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 05/11/2018 08:21:40

Dut 05/11/2018 08:21:40

Scale Inbound 3 Operator jhyland jhyland

Inbound

Gross Tare Net 65640 1b 40160 1b 25480 1b

Tons 12.74

Comments

In

WASTE NUMBERIEN

Froduct LD% Qty UOM Rate Tax Amount Origin'

1 Declass Soil-Tons- 100 12.74 Tons COOK

13.07

COOK



Laraway RDF 21233 W. Laraway Rd Joliet, IL, 60436 Ph: 815 727 6148

Original Ticket# 1045205

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 05/17/2018 Vehicle# 322-20R

Payment Type Credit Account Container Manual Ticket# Driver Hauling Ticket# Check#

Route Billing # 0004289

State Waste Code Gen EPA ID Manifest 1

Destination Grid

Declass Soil-Tons- 100

FO

In

Comments

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY Generator

Time Scale Operator Inbound Gross 66000 lb 05/17/2018 14:33:41 Inbound 2 connelly Tare 39860 1b Out 05/17/2018 15:03:18 Outbound jhyland Net 26140 lb

Tons

13.07 Tons

LD% Qty Product Rate. Tax Amount Origin



Original Ticket# 1045742

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 05/18/2018 Vehicle# 324-20R

Payment Type Credit Account Container Manual Ticket# Driver Hauling Ticket# Check#

Billing # 0004289

Gen EPA ID

Grid

Manifest 1 Destination

State Waste Code

FO

Profile

Route

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time Scale Operator Inbound Gross 70360 1b In 05/18/2018 15:02:18 Inbound 1 cconnelly Tare 40180 1b Out 05/18/2018 15:24:31 Outbound cconnelly Net 30180 lb Tons 15.09

Comments

Produ	ıct		LD%	Qty	MON	Rate	Tax	Amount	Origin
1	Declass	Soil-Tons-	100	15.09	Tons				СООК



Original Ticket# 1046546

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL Ticket Date 05/22/2018 Vehicle# 323-20R

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code

Manifest Destination

PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)
Generator 117-H KRAMER AND COMPANY H MORNES & CONTAINING PCBS)

Time In 05/22/2018 12:54:08 Inbound 1 Out 05/22/2018 12:54:08

Scale

Operator cconnelly cconnelly

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

Inbound

Gross Tare Net Tons

69220 1b 40160 lb 29060 16

14.53

Comments

Prod	uct		LD%	Qty	MOM	Rate	Tax	Amount	Origin
1	Declass	Soil-Tons-	100	14.53	Tons				COOK



Original Ticket# 1046690

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Vehicle# 323-20R Volume 20.0 Ticket Date 05/23/2018

Payment Type Credit Account Container Driver Manual Ticket# Check# Hauling Ticket#

Billing # 0004289

Gen EPA ID State Waste Code Manifest 1

Grid Destination

PO

Route

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

70400 1b Time Scale Operator Inbound Gross 40160 lb In 05/23/2018 07:11:26 Inbound 1 jhyland Tare 30240 1b Out 05/23/2018 07:11:26 jhyland Net Tons 15.12

Comments

Produ	uct		LD%	Qty	MON	Rate	Tax	Amount	Origin
1	Declass	Scil-Tons-	100	15.12	Tons	- MINE DOOR KARN JEPAN SINES AND MINE MANY MINE THAN THAN	Mari Alba Abbi MARI (BYE AFFIL ABIA) ARIA ARIA ARIA ARIA ARIA ARIA ARIA A	nter (n/ p force made rejun libert second colora pout Frede sujer orbit fo	COOK



Original Ticket# 1048833

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 05/30/2018 Vehicle# 323-20R

Container

Volume 20.0

Payment Type Credit Account Manual Ticket#

Driver Check#

Billing # 0004289

Route State Waste Code

Gen EPA ID

Manifest 1

Hauling Ticket#

Destination

Grid

Profile

FO

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time

Scale

Operator

Inbound

66760 1b

In 05/30/2018 08:10:48 Inbound 1

jhyland

Gross Tare,

40160 lb 26600 lb

Out 05/30/2018 08:10:48

ihyland

Net Tons

13.30

Comments

Product	LDX	Qty	MOU	Rate	Tax	Amount	Origin
i Declass Soil	-Tons- 100	13.30	Tons		many part year must have part must have mad be	and their state and their and and and their same good core and	COOK



Original Ticket# 1049275

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 05/31/2018 Payment Type Credit Account

Container Driver

Manual Ticket# Hauling Ticket#

Check#

Route State Waste Code Billing # 0004289

Manifest 1

Gen EPA ID

Destination

Grid

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 05/31/2018 07:01:04 Out 05/31/2018 07:01:04 Scale Operator Inbound 2 jhyland Scale

Operator jhyland

Inbound

Vehicle# 323-20R Volume 20.0

Gross Tare Net

72640 1b 40160 lb 32480 lb

Tons 16.24

Comments

roduct		LD%	aty	MOU	Rate	Tax	Amount	Origin
					m pages prive being street between these passes spring pages before t		a given stars think office make their make whose more allow about place as	ng along some once the place about their part from once their part
Declass	Soil-Tons-	100	16.24	Tons				COOK

Volume 20.0



Laraway RDF 21233 W. Laraway Rd Jolist, IL. 60436 Ph: 815 727 6148

Customer Name RW COLKINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 06/05/2018 Payment Type Credit Account

Manual Ticket# Hauling Ticket# Route

State Waste Code Manifest 1

Destination PO

Generator

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS) 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 06/05/2018 08:25:48 Outbound Out 06/05/2018 08: 25: 48

Scale

Operator cconnelly cconnelly

Inbound

Gross Tare Net Tons

65760 1b 40160 1b 25600 lb

12.80

Comments

Vehicle# 323-20R

" Billing # 0004289

Container

Gen EPA ID

Driver

Check#

Grid

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
may see you see you has not see the last see, here has not not see may see has not not have here he		the part our and our last our our		the man have your year had had have had been some		** *** *** *** *** *** *** *** *** ***	
1 Declass Soil-Tons-	100	12.80	Tons	*			COOK



Original Ticket# 1051819

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL Ticket Date 06/05/2018 Vehicle# 323-20R

Payment Type Credit Account

Container

Volume 20.0

Manual Ticket# Hauling Ticket#

Driver Check#

Billing # 0004289

Gen EPA ID

State Waste Code Manifest 1 Destination

Grid

Profile

Route

PO

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time Scale Operator In 06/05/2018 13:47:28 Inbound 1 cconnelly Out 06/05/2018 13:47:28

cconnelly

Inbound

Tons

Gross 65540 1b Tare 40160 1b Net 25380 lb

12.69

Comments

Product LD% Qty UOM Rate Tax Amount Origin Declass Soil-Tons- 100 12.69 Tons COOK



1850828 Original Ticket# 1054620

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL Vehicle# 323-20R Volume 20.0

Ticket Date 06/12/2018

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

koute

State Waste Code Manifest, 1

Destination PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 06/12/2018 07:23:53 Inbound 1 Out 06/12/2018 07:23:53

Scale

Operator jhyland fhyland

* Manual Weight

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

Inbound

Gross Tare Net Tons

67640 1b* 40160 16* 27480 16 13.74

Comments

Product LD% Qty UOM Rate Tax Amount Declass Soil-Tons- 100 13.74 Tons COOK



21233 W. Laraway Rd Joliet: IL, 60436 Ph: 815 727 6148

Ticket# 1056793

Volume 20.0

Customer Name RW COLLING 613405TL RW COLLIN Carrier DISPOSALL DISPOSALL Vehicle# 326-20R

Ticket Date 06/15/2019 Payment Type Credit Account

Manual Ticket# Hauling Ticket# Route

State Waste Code Manifest 1

Destination PO

Generator

Profile 613405TL (TREATED LEAD IMPACTED SOIL CONTAINING PORS) 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 06/15/2018 08:17:53 Out 06/15/2018 08:17:53

Scale Inbound 3

Operator knickleski knickleski

Billing # 0004289

Inbound Gross

Taile Nell Toms

68600 1b 39020 15 29580 1b

14.79

Comments

Container

Gen EPA ID

Check#

Grid

Froduct LD% Qty UDM Rate Tax Amount Drigin Declass Soil-Tons- 100 14.79 Tons COOK



21233 W. Laraway Rd Joliet, IL, 60436 Fh: 815 727 6148

Ticket# 1057974

Volume 15.0

Customer Name RW COLLINS 613405TL RW COLLIN Carrier ZAMIRAS ZAMIRAS € Vehicle# 03

Ticket Date 06/18/2018 Fayment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code Manifest 1

Destination PO

Frofile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING FCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 06/18/2018 12:59:24 Inbound 1 Out 06/18/2018 13:28:19 Outbound

Scale

Operator knickleski knickleski

Container

Gen EFA ID

Driver

Checks

Grid

* Manual Weight

Billing # 0004289

Inbound Gross Tare Net

Tons

21880 lb 19840 1b 9.92

41720 1b*

Comments

Fro	chac t	L.D%	Qty	MOU	Rate	Tax	Amount	Origin
			****	100m 100m 2 and Square Series 60m a 300m and	9 Pieth Balla Phill Park Park 1400 1400 1000 1000 1000 1000 1000 100			
1	Declass Soil-Tons	- 100	9.92	Tons				CODK



Ticket# 1057882

Volume 15.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier APRESA APRESA Vehicle# 9

Ticket Date 06/18/2018

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route

State Waste Code

ManiTest 1 Destination

PO

Profile

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING POBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY Generator

06/18/2018 11:40:15 Out 06/18/2018 12:01:45 Inbound 1

Operator diohnson cconnelly

Container

Gen EFA ID

Billing # 0004289

Driver

Check#

Grid

Inbound

Gross Tare Net

41460 Tb 9,31

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
THE RES AND THE THE REST OF THE REST WAS DRIVED THE REST OF THE REST.							
1 Declass So	11-Tons- 100	9.31	Tons				COOK

Total Tax





Joliet, IL, 60436

Customer Name RW COLLINS 613405IL RW COLLIN Carrier TL GUERRERO TL GUERRERO Ticket Date 06/18/2018

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Manifest 1

Profile 61340SIL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

tronk knickleski



21233 W. Laraway Rd Joliet, IL, 60436

Original Ticket# 1058124

Volume 15.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier APRESA APRESA

Payment Type Credit Account

Vehicle# 9

Check#

Billing # 0004289

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Manual Ticket# . Hauling Ticket#

State Waste Code Manifest 1

In 06/18/2018 14:51:54 Dut 06/18/2018 14:51:54

Scale

Operator DJOHNSON

Inbound

Gross Tare Net

48640 1b

Tons

7	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin	
	the second property and the same and the same and the		-					-	
							the same of the same page and the same same same and the	the first and have been presented and the same has been been also	
	1 Declass So	il-Tons- 100	12.90	Tone					
			Andrew Miles	A THE PARTY OF THE				EBBK	



Original Ticket# 1058837

Volume 10.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier ZAMIRAS ZAMIRAS Vehicle# 00

Ticket Date 06/19/2018

Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code

Manifest 1

Destination PO

Profile Generator

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time

In 06/19/2018 14:33:17 Out 06/19/2018 14:33:17

Scale Inbound 1

Operator tronk tronk

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

Inbound

Tare Net Tons

Gross

40540 lb 25000 lb

15540 lb 7.77

Comments

Product		LD%	Oty	UOM	Rate	Tax	Amount	Origin		
1	Declass Soil-Tons-	100	7.77	Tons			-	COOK		



21233 W. Laraway Rd Joliet, IL, 60436 Ph: 815 727 6148

Ticket# 1058490

Volume 10.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier ZAMIRAS ZAMIRAS Vehicle# 00

Ticket Date 06/19/2018 Payment Type Credit Account

Manual Ticketh Hauling Ticket#

Route State Waste Code Manifest

Destination FO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING FCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 06/19/2018 10:23:29 Out 06/19/2018 10:42:51 Outbound

Scale Inbound 2

Operator cconnelly knickleski

Container

Billing #

Gen EFA ID

Driver

Check#

Grid

Inbound

0004289

Gross Tare Net

44040 1b 25000 18

19040 lb Tons 9.52

Comments

Oty Froduct LD% UOM Rate Tax Amount Origin Declass Soil-Tons- 100 9,52 Tons COOK



Original Ticket# 1058496

Volume 15.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier ZAMIRAS ZAMIRAS

Ticket Date 06/19/2018 Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code

Manifest 1

Destination

PO Generator

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 05/19/2018 10:28:50 Inbound 1 Out 06/19/2018 10:28:50

Scale

Operator djohnson djohnson

Vehicle# 03

Gen EPA ID

Billing # 0004289

Container

Driver

Check#

Grid

Inbound

Tare Net Tons

Gross

44540 lb 21880 lb 22660 lb

11.33

Comments

Product		LD%	Qty	MOU	Rate	Tax	Amount	Origin
1	Declass Soil-Tons-	100	11.33	Tons	il team mind mony pain hays some stant plant leggs steep some natio	O SAND SAND SAND SAND SAND SAND SAND SAND	and made gave, proof made alone alone, paper group hash made	COOK



Laraway RDF

21233 W. Laraway Rd Joliet, IL, 60436 Ph: 815 727 6148

Original Ticket# 1058813

Customer Name RW COLLINS 613405IL RW COLLIN Carrier ZAMIRAS ZAMIRAS

Ticket Date 06/19/2018 Vehicle# 03

Container

Volume 15.0

Payment Type Credit Account Manual Ticket#

Hauling Ticket#

Driver Check#

Billing # 0004289

Gen EPA ID

State Waste Code Manifest 1

Destination

Grid

PO

Route

Frofile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time Scale Operator Inbound Gross 43780 lb 06/19/2018 14:15:55 Inbound 2 trork Tare 21880 lb

Dut 06/19/2018 14:15:55 tronk Net 21900 16 Tons 10.95

Comments

Pro	duct	LD%	Qty	MOU	Rate	Tax	Amount	Origin
	-				special prints action planed from player broke second planes defined against across			
1	Declass Soil-Tons-	100	10.95	Tons				COOK ,



21233 W. Laraway Rd Joliet, IL, 60436 Pb: 815 727 6148

Ticket# 1058479

Volume 15.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier BLIZZARD BLIZZARD

Ticket Date 06/19/2018 -Vehicle# 7

Fayment Type Credit Account

Manual Ticket# Hauling Ticket# Route

State Waste Code Manifest 1

Destination PO

Frofile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS).
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 06/19/2018 10:15:35 Inbound 4 Out 06/19/2018 10:40:51 Outbound

Scale

Operator knickleski knickleski

Container

Gen EFA ID

Billing # 0004289

Driver

Check#

Grid

Inbound

Gross Tare Net Tons

43640 lb 24160 1b 19480 1b

9.74

Comments

Froe	duc't	LDX	Qty	MON	Rate	Tax	Amount	Origin
1	Declass Soil-Tons-	100	9.74	Tons	,000 000 0000 000 A 60 6000 0 000 600 600	Pend West 21 to End t 65 or \$5.00 and 5 and 5	HTT 1-00 1-00 100 100 100 100 100 100 100 1	СООК

Ticket# 1058768

Volume 15.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier BLOOMING BLOOMING Vehicle# 50

Ticket Date 06/19/2018
Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route

State Waste Code Manifest 1

Destination

PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 06/19/2018 13:40:34 Inbound 2 In Out 06/19/2018 13:40:34

Scale

Operator coonnelly cconnelly

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

Inbound

Gross Tare Net

Tons

43620 1b 22100 lb 21520 lb 10.76

Comments

Product		LD%	Qty	UOM	Rate	Tax	Amount	Origin
the said age one had age from the s	of the time are the control to the time and the control to the time and	me one one one and one on a					ne the ter ter ter and an electric terminal and terminal	the time that the last that the side and the time that the
1 Dec	ass Soil-Tons-	100	10.76	Tons				COOK



Original Ticket# 1058801

Volume 15.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier BLIZZARD BLIZZARD Vehicle# 7

Ticket Date 06/19/2018 Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code

Manifest 1 Destination

Generator

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 06/19/2018 14:04:48 Inbound 1 Dut 06/19/2018 14:04:48

Scale

Operator trork trork

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

Inbound

Gross Tare Net Tons

47080 lb 24160 lb

22920 16 11.46

Comments

Product

Declass Soil-Tons- 100 11.46 Tons

LD% Qty UOM Rate Tax Amount

Origin

COOK



Ticket Date 06/19/2018 Vehicle# 50

State Waste Code

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PORS)

knickleski

Billing #

Product	LDX	UOM	Rate		
A V			······································	Ambunt	Origin
1 Declass Soil-Tor	100	Tons			



Original Ticket# 1059174

Customer Name RW COLLINS 613405IL RW COLLIN Carrier TL GUERRERO TL GUERRERO Ticket Date 06/20/2018:

Vehicle# Of

Volume 10.0

Payment Type Credit Account Container Manual Ticket# Driver Hauling Ticket#

SER SECTION

Check# Billing #

Gen EFA ID

Grid

Destination .

State Waste Code

Manifest i

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY Generator

Time

06/20/2018 09:29:29 Dut 06/20/2018 09:29:29

Scale

Operator trork trork

Inbound

Gross Tare Net Tons

42640 1b 17360 lb 8.48

Pri	duct	L.D%	Qty.	UOM	Rate	Tax	Amount	Origin
	the first term to be and the first time and the second time the same and the same and the						1. 1711/10/10/11 1 to	OL TRIU
1	Declass Soil-Tons-	100	8.68	Tone				
				1.0011.00				COOK

2.01



Laraway RDF 21233 W. Laraway Rd Joliet, IL, 60436 Ph: 815 727 6148

Original Ticket# 1059491

Customer Name RW COLLINS 613405IL RW COLLIN Carrier TL GUERRERO TL GUERRERO

Ticket Date 06/20/2018 Vehicle# 01 Volume 10.0

Payment Type Credit Account Container Manual Ticket# Driver Hauling Ticket# Check#

Billing # 0004289 Route

State Waste Code Gen EFA ID

Manifest 1 Destination

PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time Scale Operator Inbound Gross 29300 lb In 06/20/2018 13:19:40 Inbound 1 DJOHNSON Tare 25280 lb Dut 06/20/2018 13:19:40 Net DJOHNSON 4020 1b

Grid

Comments

Pro	duct	LD%	Qty	MOU	Rate	Тах	Amount	Origin
1	Declass Soil-Tons-	100	2.01	Tons	THE THE SHEET THE SHEET HAVE SHEET SHEET COME SHEET SHEET SHEET			COOK

Tons

Volume 15.0



Laraway RDF 21233 W. Laraway Rd Joliet, IL, 60436 Ph: 815 727 6148

Customer Name RW COLLINS 613405IL RW COLLIN Carrier Inter Paving Inter Paving

Vehicle# 51 Ticket Date 06/20/2018

Payment Type Credit Account Container Manual Ticket# Driver Hauling Ticket# Check常

Billing # 0004289 Route

Gen EPA ID State Waste Code Manirest 1

Destination Grid PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Inbound Gross Scale 39920 1b Time Operator In 06/20/2018 10:01:22 Inbound 2 connelly Out 06/20/2018 10:16:37 Outbound connelly Tare 23740 lb 16180 lb Net Tons 8.09

Comments

LD% Qty UOM Rate Tax Product Amount Origin Declass Soil-Tons- 100 8.09 Tons COOK



Laraway RDF Joliet, 1L, 60436 Ph: 815 727 6148

Ticket# 1059180

tomer Name RW COLLINS 613405IL RW COLLIN Carrier APRESA APRESA

ment Type Credit Account ual Ticket# ling-Ticket#

te Waste Code

tination

Vehicle# 9

Driver Check#

Billing # 0004289

file 613405IL (TREATED LEAD IMPACTED SDIL CONTAINING PCBS)
erator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Scale

Openator

Gross Tare Net Tons

ments

duct		LD%	Qty	MOU	Rate	Tax	Amount	Origin
Dec1	ass Soil-Tons	- 100	11.03	Tons				COOK

1855858

21233 W. Laraway Rd

Customer Name RW COLLINS 613405IL RW COLLIN Carrier

Manual Ticket#

Vehicle# 58

Billing # 0004289

117-H KRAMER AND COMPANY IN KRAMER & COMPANY

Product			Rate	Tax	Origin
1 Declass Soil-Tons	- 100				



Customer Name RW COLLINS 613405IL RW COLLIN Carrier

DISPOSALL DISPOSALL

Ticket Date 07/03/2018

Vehicle# 325-20R Volume 20.0

Fayment Type Credit Account

Container Driver

Manual Ticket# Hauling Ticket#

Check# Billing # 0004289

Route

State Waste Code

Gen EPA ID

Manitest 1 Destination

Grid

PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time

Scale

Operator

Inbound Gross

69940 1b

07/03/2018 07:58:17 Inbound 3 Out 07/03/2018 07:58:17

invland jhy land

Tare Net

Tons

40420 lb 29520 1b

14.76

Comments

Prod	uct	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Declass Soil-Tons-	100	14. 76	Tons	P MAN SIGN COLD THAN AND AND SIGN SIGN SIGN SIGN SIGN SIGN SIGN SIGN	er same kan kan saat same sage same kagat same sa	e and the time time time the time and any time time	COOK



Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 07/03/2018

Vehicle# 325-20R Payment Type Credit Account Container

Volume 20.0

Manual Ticket#

Driver Check#

Hauling Ticket# Route

Billing # 0004289

State Waste Code Manifest 1

Gen EPA ID

Destination PO

Grid

Profile

613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

Generator

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 07/03/2018 11:36:36

Scale Inbound 3

Operator djohnson

Inbound

66240 1b 40420 1b

Out 07/03/2018 11:36:36

djohnson

Net Tons

Gross

Tare

25820 1b 12.91

Comments

Prod	luct	LD%	Qty	MON	Rate	Tax	Amount	Origin
1	Declass Soil-Tons-	100	12.91	Tons	i dair filian bian shah dair virar dair keur dair virar keur gais s		THE THE SEE SEE SEE SEE SEE SEE SEE SEE SEE S	COOK



14477033 Original Ticket# 1067061

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 07/10/2018
Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code Manifest 1

Destination

PO

Generator

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)

117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time 07/10/2018 08: 19: 25 Out 07/10/2018 08: 19: 25

Scale Inbound 3

Operator knickleski knickleski

Inbound

Vehicle# 325-20R

Billing # 0004289

Container

Gen EPA ID

Driver

Check#

Grid

Gross Tare Net Tons

60280 1b 40420 15 19860 lb 9,93

Comments

Product	LD%	Qty	MOU	Rate	Tax	Amount	Origin
1 Declass Soil-Tons-	100	9. 93	Tons	Commence and the second second second second second	a need token devel deall ready need health depen-	the NAT like this trick Arist here top, poor over about again.	СООК

Drivan's Signature

Original Ticket# 1067615

Customer Name RW COLLINS 613405TL RW COLLIN Carrier DISPOSALL DISPOSALL

Ficket Date 07/11/2018
Payment Type Credit Account

Manual Ticket# Hauling Ticket# Route

State Waste Code Manifest 1

Destination PO

Profile 613405IL (TREATED LEAD IMPACTED SOIL CONTAINING FCBS)

Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time Scale Operator
In 07/11/2018 07:13:01 Inbound 1 jhyland Out 07/11/2018 07: 13: 01

jhyland

Operator Inbound Gross 66700 lb Tare

> Net Tons

Vehicle# 325-20R Volume 20.0

40420 lb 26280 lb 13.14

Comments

DIAGAMEN'S Signature

Container

Gen EPA ID

Billing # 0004289

Driver

Check#

Grid

LD% Qty UOM Rate Tax Amount Origin Product Declass Soil-Tons- 100 13.14 Tons COOK



Original Ticket# 1072160

Volume 20.0

Customer Name RW COLLINS 613405IL RW COLLIN Carrier DISPOSALL DISPOSALL

Ticket Date 07/20/2018 Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route State Waste Code

Manifest Destination

PÜ

Profile 6134051L (TREATED LEAD IMPACTED SOIL CONTAINING POBS)
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 07/20/2018 10:20:24 Inbound 1 Out 07/20/2018 10:20:24

Scale

Operator cconnelly cconnelly Inbound

Vehicle# 326-20R

Billing # 0004289

Container

Gen EPA ID

Driver

Check#

Grid

Gross Tare Net

69960 1b 39020 lb 29840 lb

Tons 44.92

Comments

raduct		LD%	Dey	UOM	Rate	Tax	Amount	Origin
*							where the latter with the state of the same of the sam	
Declass	Scil-Tons-	100	14,72	Tons				COOK

Ticket# 1072787

Customer Name RW COLLINS 618405TL RW COLLIN Carrier DISPOSALL DISPOSALL Vehicle# 324-20R Volume 20.0

Ticket Date 07/23/2018 Payment Type Credit Account

Manual Tickets

Hauling Ticket# Route

State Waste Code Manitest 1

Destination

20

Profile 613405TL (TREATED LEAD IMPACTED SOIL CONTAINING PCBS)
Generator 117-H KRAMER AND COMPANY H KRAMER & COMPANY

Time In 07/23/2018 07:03:02 Inbound 1 Out 07/23/2018 07:03:02

Scale

Operator invland jhyland

Container

Gen EPA TO

Billing # 0004289

Oriver

Check#

Grid

Inbound

Gross Tare Net

59680 1b 40180 15

19500 lb Tons 9, 75

Comments

LD% Qty UOM Rate Tax Origin Product Amount COOK Declass Soil-Tons- 100 9,75 Tons

Appendix J Technical Memos – Backfill Source Sample Data Evaluation



April 21, 2017

Mr. Ramon Mendoza
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
Superfund Division, SE-5J
77 W. Jackson Boulevard
Chicago, IL 60604

Subject: Technical Memo – Backfill Source Sample Data Evaluation

Pilsen Soil OU2 Residential Site Chicago, Cook County, Illinois EPA Contract No. EP-S5-13-01

EPA Technical Direction Document (TDD) No. S05-0001-1508-205

Document Tracking No.: 1683

Dear Mr. Mendoza:

At your request START reviewed validated backfill source samples data provided by GHD the contractor for H. Kramer (the responsible party (RP)]. This review is to determine if the soil is suitable for use as clean backfill and an engineered barrier at the Pilsen Soil OU2 Residential (Pilsen OU2) site located in the Pilsen Neighborhood in Chicago, Cook County, Illinois. The source samples data was compared to United States Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) for residential soil with a target cancer risk (TR) of 1E-06 and a target hazard quotient (THQ) of 1.0 (EPA RSLs for residential soil); Title 35 of the Illinois Administrative Code (IAC) Part 742 Tiered Approach to Corrective Action Objectives (TACO) Tier 1 remediation objectives; and Title 35 of the IAC Part 1100 Subpart F Summary of Maximum Allowable Concentrations (MAC) of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations.

The backfill source material soil samples were collected from an agricultural property located at 6521 West Monee Manhattan Road in Will County, Monee, Illinois. The backfill source material is available at this agricultural property because the property is being developed with an Amazon Warehouse. No sources of contamination are known or likely as the property is currently and has historically been developed for agricultural use. Flanagin LLC is the broker for the backfill source material.

Description of Sampling Activities

Two soil samples were collected from the backfill source material at the property. The first soil sample was collected from the backfill source material on August 2, 2016 by Flanagin LLC at 1100 hours. This sample was labelled Sample 1. The second soil sample was collected from the backfill source material on April 5, 2017 by GHD at 0815 hours. This sample was labeled S-040517-GW-01. START was not at the property on either date when the soil samples were collected from the backfill source material. START also was not provided with information regarding the sample collection method.

On August 2, 2016, Flanagin LLC collected one soil sample from the backfill source material. This sample was labeled Sample 1 and was submitted to STAT Analysis Corporation (STAT) to be analyzed for Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compound (SVOCs), Polychlorinated Biphenyls

(PCBs), pesticides, herbicides, metals, antimony by Synthetic Precipitation Leaching Procedure (SPLP), cobalt and iron by Toxicity Characteristic Leaching Procedure (TCLP), total cyanide, and pH.

A sample summary table for the initial sampling event is presented in the table below. Analytical results for the initial sample are presented in Attachment 1, Table 1 and are summarized below.

INITIAL SAMPLE SUMMARY

Sampling Activity	Sample ID	Parameters	No. of Investigative Samples	No. of Duplicates ^a	Total
Soil Sampling for Chemical Analysis	Sample 1	VOCs, SVOCs, PCBs, pesticides, herbicides, metals, antimony by SPLP, cobalt and iron by TCLP, total cyanide, pH, and percent moisture	1	0	1

Notes:

PCB Polychlorinated biphenyl

SPLP Synthetic Precipitation Leaching Procedure

SVOC Semivolatile organic compound

TCLP Toxicity Characteristic Leaching Procedure

VOC Volatile organic compound

On April 5, 2017, GHD collected an additional follow up soil sample to further assess the backfill source material. This sample was labeled S-040517-GW-01 and was submitted to TestAmerica Laboratories, Inc. (TestAmerica) to be analyzed for select VOCs (1,2-dibromo-3-chloropropane [DBCP], 1,2-dibromoethane [Ethylene dibromide], and vinyl acetate), select herbicides (alachlor, aldicarb, atrazine, and simazine), a pesticide (carbofuran), boron, chloride, fluoride, n-butyl alcohol, nitrate as N, sulfate, and total phosphorous.

These constituents are listed on Title 35 of the IAC Part 1100 Subpart F Summary of Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (Title 35 of the IAC Part 1100 Subpart F). Sample 1 collected on August 2, 2016 was not analyzed for these constituents. The follow up soil sample was collected to confirm that the backfill source material met the standards in Title 35 of the IAC Part 1100 Subpart F. Analytical results for the follow up sample are presented in Attachment 1, Table 2 and are summarized below.

FOLLOW UP SAMPLE SUMMARY

Sampling Activity	Sample ID	Parameters	No. of Investigative Samples	No. of Duplicates ^a	Total
Soil Sampling for Chemical Analysis	S-040517-GW-01	1,2-dibromo-3-chloropropane, 1,2-dibromoethane, vinyl acetate, alachlor, aldicarb, atrazine, carbofuran, simazine, boron, chloride, fluoride, n-butyl alcohol, nitrate as N, sulfate, and total phosphorous	1	0	1

Initial Analytical Results

Flanagin LLC collected Sample 1 as a soil sample from the backfill source material on August 2, 2016. Following analysis of the sample by STAT, Flanagin LLC gave STAT approval to release the QA/QC data from the sample analysis to GHD. A GHD Chemist reviewed the data and the QA/QC report and generated a reduced data validation memo. The data validation memo was submitted to EPA on April 10, 2017. The data validation memo was reviewed by a START chemist on April 18, 2017. The START chemist review did not result in any changes to the results summarized in the data validation memo.

Validated analytical results for Sample 1 are presented in Attachment 1, Table 1. Validated analytical results for Sample 1 compared to pH specific soil component of groundwater ingestion standards are presented in Attachment 1, Table 2. The laboratory analytical results were compared to the EPA RSLs for residential soil; the TACO Tier 1 remediation objectives listed in Title 35 of the IAC Part 742; and the maximum allowable concentration (MAC) standards listed in Title 35 of the IAC Part 1100 Subpart F.

The following analytical results exceeded one or more criteria:

- Acenaphthylene was not detected but the reporting limit of 0.04 mg/kg exceeds the TACO background value for metropolitan statistical areas (MSA) of 0.03 mg/kg. However, no other criteria exist for this constituent, thus this is compound is not considered to exceed criteria.
- Benzo(a)pyrene and dibenz(a,h)anthracene were not detected but the reporting limits of 0.04 mg/kg exceed the EPA RSL in residential soil of 0.016 mg/kg. However, the TACO background values for MSAs for benzo(a)pyrene is 1.3 mg/kg and for dibenz(a,h)anthracene is 0.20 mg/kg. Thus, these compounds are not considered to exceed criteria.
- Benzidine was not detected but the reporting limit exceeds the EPA RSL for residential soil. No other criteria exists for this constituents. The predominant use for benzidine is in the production of dyes, especially azo dyes in the leather, textile, and paper industries. However, benzidine is no longer produced for commercial sale in the United States. In 1973, Occupational Safety and Health Association (OSHA) regulations banned United States production of benzidine. In addition, benzidine is no longer imported into the United States. This information was obtained from a chemical fact sheet for benzidine from the EPA updated in 2000 and can be located here: https://www.epa.gov/sites/production/files/2016-09/documents/benzidine.pdf. Because it is no longer produced or imported in the United States and because of its primary use in an industrial setting it would be unlikely to find concentrations of benzidine in soil in agricultural areas. START reviewed historical aerial photographs of the property on Google Earth and the historical aerials viewer by NETR online dating back to 1939 which can be located here: https://www.historicaerials.com/viewer. The property has remained developed for agricultural use from 1939 to the most recent available aerial

- on Google Earth from 2015. Because this compound is not expected to have been used at this source site, this issue is deemed to not be of concern.
- N-nitrosodimethylamine (NDMA) was not detected but the reporting limit exceeds the EPA RSL for residential soil. No other criteria exists for this constituents. NDMA is not currently produced in pure form or commercially used in the United States, except for research purposes. It was formerly used in production of liquid rocket fuel, antioxidants, additives for lubricants and softeners for copolymers (ATSDR 1989; HSDB 2012). NDMA can be unintentionally produced in and released from industrial sources through chemical reactions, such as those that involve alkylamines with nitrogen oxides, nitrous acid or nitrite salts. Potential industrial sources include byproducts from tanneries, pesticide manufacturing plants, rubber and tire manufacturers, alkylamine manufacture and use sites, fish processing facilities, foundries and dye manufacturers (ATSDR 1989). NDMA is also an unintended byproduct of the chlorination of wastewater and drinking water at treatment plants that use chloramines for disinfection. This information was obtained from a chemical fact sheet for NDMA from the EPA updated in 2014 and can be located here:

https://www.epa.gov/sites/production/files/2014-

- <u>03/documents/ffrrofactsheet_contaminant_ndma_january2014_final.pdf</u>. Because it is no longer produced or used in the United States and because of its primary use in an industrial setting it would be unlikely to find concentrations of NDMA in soil in agricultural areas. START reviewed historical aerial photographs of the property on Google Earth and the historical aerials viewer by NETR online dating back to 1939 which can be located here: https://www.historicaerials.com/viewer. The property has remained developed for agricultural use from 1939 to the most recent available aerial on Google Earth from 2015. Because this compound is not expected to have been used at this source site, this issue is deemed to not be of concern.
- Bis(2-chloroethyl)ether was not detected but the reporting limit of 0.21 mg/kg exceeds the Class I and II soil to groundwater ingestion route and residential inhalation standard. However, the MAC is 0.66 mg/kg and the EPA RSL is 0.23 mg/kg. Thus, this s is not considered an exceedance.
- 3,3-Dichlorobenzidine, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, and 2,6-Dinitrotoluene were not detected but the reporting limits exceed the Class I and II soil to groundwater ingestion route standards. However, the concentrations do not exceed the MAC standards, EPA RSLs or TACO Tier 1 remediation for residential properties. Thus, these compounds are not considered to be of concern.
- N-Nitroso di-n-propylamine was not detected but the reporting limit exceeds the MAC standards and the Class I and II soil to groundwater ingestion exposure route remediation objectives. However, the reporting limit does not exceed the EPA RSLs or the TACO Tier 1 remediation objectives for residential properties. Thus, this compound is not considered to be of concern.
- Pentachlorophenol was not detected but the reporting limit exceeds the TACO Tier 1 Class I soil to groundwater ingestion exposure route remediation objective and the MAC standard. However, the reporting limit does not exceed the EPA RSL or the TACO Tier 1 remediation objective for residential properties. Thus, this compound is not considered to be of concern.
- 2,4,6-trichlorophenol, and alpha-BHC were not detected but the reporting limits exceed the TACO Tier 1 Class I soil to groundwater ingestion exposure route remediation objective. However, the reporting limits do not exceed the EPA RSLs or the TACO Tier 1 remediation objectives for residential properties. Thus, these compounds are not considered to be of concern. Aluminum was detected at a concentration of 13,000 mg/kg which exceeds the concentration in background soils of 9,500 mg/kg. However, this concentration does not exceed the EPA RSL for residential soil 77,000 mg/kg. Thus, this compound is not considered to be of concern.
- Antimony was detected at a concentration of 6.9 mg/kg which exceeds the TACO background soil
 concentration of 4.0 mg/kg, the MAC standard of 5 mg/kg, and the pH specific Class I soil to
 groundwater ingestion route value of 5 mg/kg. However, this concentration does not exceed EPA
 RSL or the TACO Tier 1 remediation objective for residential properties. Thus, this is not considered
 an exceedance.

- Beryllium, chromium, cobalt, iron, selenium, and vanadium were detected at concentrations exceeding
 the TACO background soil concentrations. However, these concentrations do not exceed the EPA
 RSLs or the TACO Tier 1 remediation objectives. Thus, this is not considered an exceedance.
- Arsenic was detected at a concentration of 6.8 mg/kg which exceeds the EPA RSL for residential soil
 of 0.68 mg/kg. However, this concentration is below the TACO background soil concentration of 13.0
 mg/kg. Thus, this is not considered an exceedance.
- Silver was not detected but the reporting limit of 1.0 mg/kg exceeds the concentration in background soil of 0.55 mg/kg. However, the reporting limit does not exceed the EPA RSLs or the TACO Tier 1 remediation objectives. Thus, this is not considered an exceedance.
- Thallium was not detected but the reporting limit of 1.0 mg/kg exceeds the concentration in TACO background soil of 0.32 mg/kg and the EPA RSL for residential soil of 0.78 mg/kg. However, the reporting limit is below the MAC of 2.6 mg/kg and TACO Tier 1 remediation objective for residential properties of 6.3 mg/kg. Thus, this is not considered an exceedance.

Compounds at concentrations that exceed the TACO Tier 1 Class I and II soil to groundwater ingestion exposure route remediation objectives are not considered to be of concern because the Pilsen OU2 site is located within the Pilsen Neighborhood in Chicago, Cook County, IL where groundwater is no longer in use and a Memorandum of Understanding is in place to prohibit use of groundwater for potable purposes. Thus, this potential exposure route is not a complete pathway and is deemed to not be of concern. No other VOCs, SVOCs, PCBs, pesticides, herbicides, or metals were detected in Sample 1 at concentrations exceeding EPA RSLs for residential soil; TACO Tier 1 remediation objectives in Title 35 of the IAC Part 742 TACO criteria; and MAC standards in Title 35 of the IAC Part 1100 Subpart F.

Follow Up Analytical Results

GHD collected S-040517-GW-01 as a follow up backfill source material soil sample on April 5, 2017. Following analysis of the sample by TestAmerica, a GHD Chemist reviewed the data and the QA/QC report and generated a reduced data validation memo. The data validation memo was submitted to EPA on April 14, 2017. The data validation memo was reviewed by a START chemist on April 18, 2017. The START chemist provided comments regarding the constituent endothall which was not included in the analyses performed by TestAmerica and the vinyl acetate result that was rejected due to poor recovery. The review did not result in any changes to the results summarized in the data validation memo.

START recommended endothall be included in the follow up analysis. Endothall is listed on Title 35 of the IAC Part 1100 Subpart F. Sample 1 collected on August 2, 2016 was not analyzed for endothall. The follow up analysis would determine endothall concentrations do not exceed applicable standards in the backfill source material. However, GHD could not locate a lab that performed endothall analysis in soil.

Endothall is primarily used as an aquatic herbicide. Most concerns about adverse health effects revolve around applicator exposure. At this time, the EPA believes endothall poses no unacceptable risks to water users if water use restrictions are followed. EPA has determined that endothall is not a neurotoxicant or mutagen, nor is it likely to be a human carcinogen. This information was obtained from a chemical fact sheet for endothall from the Wisconsin Department of Natural Resources updated in 2012 and can be located here: http://dnr.wi.gov/lakes/plants/factsheets/EndothallFactsheet.pdf. Therefore, START does not consider endothall a concern for the backfill source material at this time and does not recommend analyzing future backfill source material soil samples for endothall.

Vinyl acetate was not detected with a reporting limit of 0.013 mg/kg on the initial lab report submitted by TestAmerica. TestAmerica flagged the vinyl acetate non-detect result with an F1 qualifier indicating Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recovery was outside acceptance limits. GHD flagged this

result with an R qualifier in their data validation memo submitted to EPA on April 14, 2017. The R qualifier indicated the result was rejected due to 0% recoveries in the MS and MSD. Therefore there is no reliable data indicating the presence or absence of vinyl acetate in the soil sample. The main use of vinyl acetate is as a chemical intermediate in the production of mostly polymers, such as wood glue ("white glue"), water-based paints, paper coatings/inks, and fibers. Vinyl acetate is only minor impurity in those products. This information was obtained from a chemical fact sheet from the Agency for Toxic Substance and Disease Registry updated in 2015 and can be located here:

https://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=671&tid=124#bookmark08. Because of its primary use in an industrial setting it would be unlikely to find concentrations of vinyl acetate in soil in agricultural areas. START reviewed historical aerial photographs of the property on Google Earth and the historical aerials viewer by NETR online dating back to 1939 which can be located here:

https://www.historicaerials.com/viewer. The property has remained developed for agricultural use from 1939 to the most recent available aerial on Google Earth from 2015. In addition, this compound is considered a poor responder to standard analytical methods. Thus, it may be difficult to obtain valid laboratory analytical data on this compound. Because this compound is not expected to have been used at this source site, this issue is deemed to not be of concern. However, START recommends that future analysis of backfill source material soil samples include vinyl acetate conducted as an MS and MSD to confirm the initial lab result that vinyl acetate was not detected.

Validated analytical results for S-040517-GW-01 are presented in Attachment 1, Table 3. The laboratory analytical results were compared to the EPA RSLs for residential soil; Title 35 of the IAC Part 742 TACO Tier 1 remediation objectives; and MAC standards listed in Title 35 of the IAC Part 1100 Subpart F.

The following analytical results exceeded one or more criteria:

- Alachlor, aldicarb, boron, 1,2-dibromoethane, and simazine were not detected but the reporting limits exceed the TACO Tier 1 remediation objectives for the Class I and II soil to groundwater ingestion exposure route. The reporting limits do not exceed EPA RSLs or TACO Tier 1 remediation objectives for residential properties. Thus, these are not considered as exceedances.
- Atrazine and carbofuran were not detected but the reporting limits exceed the TACO Tier 1 remediation objectives for the Class I soil to groundwater ingestion exposure route. The reporting limits do not exceed EPA RSLs or TACO Tier 1 remediation objectives for residential properties. Thus, these are not considered as exceedances.
- 1,2-dibromo-3-chloropropane was not detected but the reporting limit of 0.013 mg/kg exceeds the TACO Tier 1 remediation objective for the Class I soil to groundwater ingestion exposure route, the MAC standard and the EPA RSL for residential soil. However, TestAmerica was reporting compound concentrations down to the method detection limit (MDL). Had 1,2-dibromo-3-chloropropane been detected above the method detection limit of 0.00087 mg/kg the result would have been reported. The result would also have been flagged with the qualifier J for an approximate result less than the reporting limit but greater than or equal to the MDL. The MDL does not exceed the EPA RSL, the MAC standard, nor the TACO Tier 1 remediation objective for residential properties. Thus, this is not considered an exceedance.
- Fluoride was detected and the concentration exceeds the TACO Tier 1 remediation objective for the Class I and Class II soil to groundwater ingestion exposure route. However, the concentration does not exceed the EPA RSL, the MAC standard, nor the TACO Tier 1 remediation objective for residential properties. Thus, this is not considered an exceedance.
- Nitrate as N was detected and the concentration exceeds the TACO Tier 1 remediation objective for
 the Class I soil to groundwater ingestion exposure route. However, the concentration does not exceed
 the EPA RSL, the MAC standard, nor the TACO Tier 1 remediation objective for residential
 properties. Thus, this is not considered an exceedance.

Exceedances of the TACO Tier 1 remediation objectives for the Class I and II soil to groundwater ingestion exposure route were ruled out as exceedances as the Pilsen OU2 site is located within the Pilsen Neighborhood in Chicago, Cook County, IL where groundwater is no longer in use and a Memorandum of Understanding is in place to prohibit use of groundwater for potable purposes. Thus, this exposure route is not a complete pathway and is deemed to not be of concern. No other VOCs, SVOCs, PCBs, pesticides, herbicides, or metals were detected in S-040517-GW-01 at concentrations exceeding EPA RSLs for residential soil; Title 35 of the IAC Part 742 TACO Tier 1 remediation objectives for residential properties; and Title 35 of the IAC Part 1100 Subpart F MAC standards.

Summary

Two samples were collected of the soil to be imported as backfill. Flanagin LLC collected Sample 1 as a soil sample from the backfill source material on August 2, 2016. GHD collected S-040517-GW-01 as a follow up backfill source material soil sample on April 5, 2017. Sample 1 was submitted to STAT to be analyzed for VOCs, SVOCs, PCBs, pesticides, herbicides, metals, antimony by SPLP, cobalt and iron by TCLP, total cyanide, and pH. S-040517-GW-01 and was submitted to TestAmerica to be analyzed for select VOCs (1,2-dibromo-3-chloropropane [DBCP], 1,2-dibromoethane [Ethylene dibromide], and vinyl acetate), select herbicides (alachlor, aldicarb, atrazine, and simazine), a pesticide (carbofuran), boron, chloride, fluoride, n-butyl alcohol, nitrate as N, sulfate, and total phosphorous. A GHD Chemist reviewed the data and the QA/QC report for both samples and generated reduced data validation memos. The data validation memos were reviewed by a START chemist on April 18, 2017. The validated data were compared with EPA RSLs for residential soil; the TACO Tier 1 remediation objectives; and MAC standards. The following is a summary of the findings:

Exceedances of only the Class I and II soil to groundwater ingestion route standards were ruled out as exceedances as the Pilsen OU2 site is located within the Pilsen Neighborhood in Chicago, Cook County, IL where groundwater is no longer in use and a Memorandum of Understanding is in place to prohibit use of groundwater for potable purposes. Thus, this exposure route is not a complete pathway and is deemed to not be of concern. Constituent concentrations below TACO background soil concentrations were also ruled out as exceedances.

START has the following recommendations for future backfill source material soil sample analysis:

- 1. Benzidine and n-nitrosodimethylamine (NDMA) were not detected but the reporting limits exceed the EPA RSL for residential soil. No other criteria exists for these constituents. The property has remained developed for agricultural use from 1939 to the most recent available aerial on Google Earth from 2015. Because these compounds are no longer produced or used in significant quantities in the United States and because of their primary use in industrial settings it would be unlikely to find concentrations of benzidine or NDMA in soil in agricultural areas. Because these compounds are not expected to have been used at this source site, this issue is deemed to not be of concern.
- 2. The vinyl acetate laboratory analytical result was rejected. Based on primary use and review of the historic use of the property START does not consider vinyl acetate a concern for the backfill source material at this time. However, START recommends that future analysis of backfill source material soil samples include vinyl acetate conducted as an MS and MSD to confirm the initial lab result that vinyl acetate was not detected.
- 3. The largest removal properties at the Pilsen OU2 site are approximately 125 feet by 25 feet and will be excavated to 1 foot below ground surface. Therefore, a backfill volume of approximately 115 cubic yard of backfill source material will be required for one large removal property. START recommends that backfill source material soil samples be collected at a rate of one sample per 500 cubic yards

- (yd³). This will provide sufficient data for the limited quantity of backfill source material used to backfill each of the current 54 removal properties at the Pilsen OU2 site.
- 4. START additionally recommends that each additional backfill source material soil sample is analyzed for the same parameters with the exclusion of endothall.

At this time the START review of the validated analytical results for the soil samples collected from the backfill source material indicates that it is acceptable for use as clean fill and an engineered barrier at the Pilsen OU2 site.

If you have any questions regarding this submittal or would like to discuss further action, please call me at (312) 201-7710.

Sincerely,

Paul Pallardy Project Manager

Attachments (1)

					Sample 1							
									Laborat		16080104-001	
									Client Sam	•	Sample 1	
									Date Co	llected:	08/02/2016 11:00	
								IEPA Soil C	Component of			
						IEPA Resid	lential Route		ter Ingestion			
							ues for Soil ^{3,4}		oute Values 3,4			
				Concentrations of Incurrent	Maximum Allawahla Canaantustiana			Exposure Re	l alues	1		
			EDA DOLD 11 41 10 11		Maximum Allowable Concentrations					IED.		
			EPA RSL Residential Soil	and PAH Chemicals in	of Chemical Constituents In	2.4	2.4	2.4	2.4	IEPA		GHD
Parameter		Analyte	(TR 1E-06, THQ 1) 1,2	Background Soils (mg/kg) ^{3,4}		Ingestion 3,4	Inhalation 3,4	Class I 3,4	Class II 3,4	ADL 3,4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Qualifier
VOC	67-64-1	Acetone	61000		25	70,000	100,000	25	25		< 0.086	
	71-43-2	Benzene	1.2		0.03	12	0.8	0.03	0.17		< 0.0057	
	75-27-4	Bromodichloromethane	0.29		0.6	10	3,000	0.6	0.6		< 0.0057	
	75-25-2	Bromoform	19		0.8	81	53	0.8	0.8		< 0.0057	
	74-83-9	Bromomethane	6.8		0.2	110	10 / 3.9*	0.2	1.2		< 0.011	
	78-93-3	2-Butanone	27000								< 0.086	
	75-15-0	Carbon disulfide	770		9	7,800	720 / 9.0*	32	160		< 0.057	
	56-23-5	Carbon tetrachloride	0.65		0.07	5	0.3	0.07	0.33		< 0.0057	
	108-90-7	Chlorobenzene	280		1	1,600	130 / 1.3*	1	6.5		< 0.0057	
	75-00-3	Chloroethane	14000								< 0.011	
	67-66-3	Chloroform	0.32		0.3	100	0.3	0.6	2.9		< 0.0057	
	74-87-3	Chloromethane	110								< 0.011	
	+	Dibromochloromethane	8.3		0.4	1,600	1,300	0.4	0.4		< 0.0057	
	75-34-3	1,1-Dichloroethane	3.6		36	7,800	1,300 / 130*	23	110		< 0.0057	
	107-06-2	1,2-Dichloroethane	0.46		0.02	7,300	0.4	0.02	0.1		< 0.0057	
	75-35-4	1,1-Dichloroethene	230		0.06	3,900	290 / 3.0*	0.06	0.3		< 0.0057	
	156-59-2	cis-1,2-Dichloroethene	160		0.4	780	1,200	0.4	1.1		< 0.0057	
	156-60-5	trans-1,2-Dichloroethene	1600		0.7	1,600	3,100	0.7	3.4		< 0.0057	
	78-87-5	· · · · · · · · · · · · · · · · · · ·	1000				15 / 0.50*	0.03			< 0.0057	
		1,2-Dichloropropane	1		0.03	9			0.15			
		cis-1,3-Dichloropropene			0.005	6.4	1.1 / 0.39*	0.004	0.02	0.005	< 0.0023	
		trans-1,3-Dichloropropene			0.005	6.4	1.1 / 0.39*	0.004	0.02	0.005	< 0.0023	
	100-41-4	Ethylbenzene	5.8		13	7,800	400 / 58*	13	19		< 0.0057	
	591-78-6	2-Hexanone	200								< 0.023	
		4-Methyl-2-pentanone	33000								< 0.023	
	75-09-2	Methylene chloride	57		0.02	85	13	0.02	0.2		< 0.011	
		Methyl tert-butyl ether	47		0.32	780	8,800 / 140*	0.32	0.32		< 0.0057	
	100-42-5	Styrene	6000		4.0	16,000	1,500 / 430*	4	18		< 0.0057	
	79-34-5	1,1,2,2-Tetrachloroethane	0.6								< 0.0057	
	127-18-4	Tetrachloroethene	24		0.06	12	11	0.06	0.3		< 0.0057	
	108-88-3	Toluene	4900		12	16,000	650 / 42*	12	29		< 0.0057	
	71-55-6	1,1,1-Trichloroethane	8100		2		1,200	2	9.6		< 0.0057	
	79-00-5	1,1,2-Trichloroethane	1.1		0.02	310	1,800	0.02	0.3		< 0.0057	
	79-01-6	Trichloroethene	0.94		0.06	58	5	0.06	0.3		< 0.0057	
	75-01-4	Vinyl chloride	0.059		0.01	0.46	0.28	0.01	0.07		< 0.0057	
	1330-20-7	Xylenes, Total	580		5.6	16,000	320 / 5.6*	150	150		< 0.017	
PAH	83-32-9	Acenaphthene	3600	0.09	570	4,700		570	2,900		< 0.040	
	208-96-8	Acenaphthylene		0.03							< 0.040	
	120-12-7	Anthracene	18000	0.25	12,000	23,000		12,000	59,000		< 0.040	
	56-55-3	Benz(a)anthracene	0.16	1.1	1.1	0.9		2	8		< 0.040	
	50-32-8	Benzo(a)pyrene	0.016	1.3	1.3	0.09		8	82		< 0.040	
	205-99-2	Benzo(b)fluoranthene	0.16	1.5	1.5	0.9		5	25		< 0.040	
		Benzo(g,h,i)perylene		0.68							< 0.040	
	+	Benzo(k)fluoranthene	1.6	0.99	9	9		49	250		< 0.040	
	218-01-9	Chrysene	1.6	1.2	88	88		160	800		< 0.040	
	+	Dibenz(a,h)anthracene	0.016	0.20	0.20	0.09		2	7.6		< 0.040 < 0.040	
1												
	+	Fluoranthene	2400	2.7	3,100	3,100		4,300	21,000		< 0.040	
	86-73-7	Fluorene	2400	0.10	560	3,100		560	2,800		< 0.040	
	193-39-5	Indeno(1,2,3-cd)pyrene	0.16	0.86	1.6	0.9	150 / 1 04	14	69		< 0.040	
	91-20-3	Naphthalene	3.8	0.04	1.8	1,600	170 / 1.8*	12	18		< 0.040	

					Sample 1					ID	1,000101.001	
									Laborat		16080104-001	
									Client Sam	lpie ID :	Sample 1 08/02/2016 11:00	
										l ecteu :	08/02/2010 11:00	
						TED . D			component of			
							lential Route		ter Ingestion			
							ues for Soil 3,4	Exposure Ro	oute Values 3,4	_		
					Maximum Allowable Concentrations							
			EPA RSL Residential Soil	and PAH Chemicals in	of Chemical Constituents In					IEPA		GHD
Parameter	CAS No.	Analyte	(TR 1E-06, THQ 1) 1,2	Background Soils (mg/kg) ^{3,4}	Uncontaminated Soil (mg/kg) 5,6	Ingestion 3,4	Inhalation ^{3,4}	Class I 3,4	Class II ^{3,4}	ADL ^{3,4}	(mg/kg)	Qualifier
	85-01-8	Phenanthrene		1.3							< 0.040	
	129-00-0	Pyrene	1800	1.9	2,300	2,300		4,200	21,000		< 0.040	
SVOC	62-53-3	Aniline	95								< 0.41	
	92-87-5	Benzidine	0.00053								< 0.40	
	65-85-0	Benzoic acid	250000		400	310,000		400	400		< 1.0	
	100-51-6	Benzyl alcohol	6300								< 0.21	
		Bis(2-chloroethoxy)methane	190								< 0.21	
		Bis(2-chloroethyl)ether	0.23		0.66	0.6	0.2	0.0004	0.0004	0.66	< 0.21	
		Bis(2-ethylhexyl)phthalate	39		46	46	31,000	3,600	31,000		< 1.0	
	101-55-3	4-Bromophenyl phenyl ether									< 0.21	
	85-68-7	Butyl benzyl phthalate	290		930	16,000	930	930	930		< 0.21	
	86-74-8	Carbazole			0.6	32		0.6	2.8		< 0.21	
	106-47-8	4-Chloroaniline	2.7		0.7	310		0.7	0.7		< 0.21	
	59-50-7	4-Chloro-3-methylphenol	6300								< 0.40	
	91-58-7	2-Chloronaphthalene	4800								< 0.21	
	95-57-8	2-Chlorophenol	390		1.5	390	53,000	4	4		< 0.21	
	7005-72-3	4-Chlorophenyl phenyl ether									< 0.21	
	132-64-9	Dibenzofuran	73								< 0.21	
	95-50-1	1,2-Dichlorobenzene	1800		17	7,000	560 / 310*	17	43		< 0.21	
	541-73-1	1,3-Dichlorobenzene									< 0.21	
	106-46-7	1,4-Dichlorobenzene	2.6		2		11,000 / 340*	2	11		< 0.21	
	91-94-1	3,3'-Dichlorobenzidine	1.2		1.3	1		0.007	0.033	1.3	< 0.21	
		2,4-Dichlorophenol	190		0.48	230		1	1		< 0.21	
		Diethyl phthalate	51000		470	63,000	2,000	470	470		< 0.21	
	105-67-9	2,4-Dimethylphenol	1300		9	1,600		9	9		< 0.21	
		Dimethyl phthalate									< 0.21	
	534-52-1	4,6-Dinitro-2-methylphenol	5.1								< 0.40	
	51-28-5	2,4-Dinitrophenol	130		3.3	160		0.2	0.2	3.3	< 1.0	
	121-14-2	2,4-Dinitrotoluene	1.7		0.25	0.9		0.0008	0.0008	0.25	< 0.040	
	606-20-2	2,6-Dinitrotoluene	0.36		0.26	0.9		0.0007	0.0007	0.26	< 0.040	
		Di-n-butyl phthalate	6300		2300	7,800	2,300	2,300	2,300		< 0.21	
		Di-n-octyl phthalate	630		1600	1,600	10,000	10,000	10,000		< 0.21	
		Hexachlorobenzene	0.21		0.4	0.4	1	2	11		< 0.21	
		Hexachlorobutadiene	1.2					400	2 200		< 0.21	
	77-47-4	Hexachlorocyclopentadiene	1.8		1.1	550	10 / 1.1*	400	2,200		< 0.21	
	67-72-1	Hexachloroethane	1.8		0.5	78	4.600	0.5	2.6		< 0.21	
	78-59-1	Isophorone	570		8	15,600	4,600	8	8		< 0.21	
	91-57-6	2-Methylnaphthalene	240		 1 <i>5</i>	2 000		1.5	1.5		< 0.21	
	95-48-7	2-Methylphenol	3200		15	3,900		15	15		< 0.21	
	106-44-5	4-Methylphenol	6300								< 0.21	
	88-74-4	2-Nitroaniline	630								< 0.21	
	99-09-2	3-Nitroaniline	 27								< 0.21	
	100-01-6 88-75-5	4-Nitroaniline	27								< 0.21 < 0.21	
		2-Nitrophenol										
	100-02-7	4-Nitrophenol	 5 1		0.26		02/0.4*	0.1	0.1	0.26	< 0.40	
	98-95-3	Nitrobenzene	5.1			39	92/9.4*	0.1	0.1	0.26	< 0.040	
	621-64-7	N-Nitrosodi-n-propylamine	0.078		0.0018	0.09		0.00005	0.00005	0.0018	< 0.040	
	62-75-9	N-Nitrosodimethylamine	0.002			120			 5		< 0.21	
	86-30-6 108-60-1	N-Nitrosodiphenylamine 2, 2'-oxybis(1-Chloropropane)	110		1	130		1	5.6		< 0.040	
		Pentachlorophenol	3100		0.02	3		0.03	0.14		< 0.21 < 0.040	
	07-00-3	i cittacinorophenor	1		0.02	J		0.03	0.14		~ 0.040	

					Sample 1							
									Laborat	ory ID :	16080104-001	
									Client Sam		Sample 1	
									Date Co	•	08/02/2016 11:00	
							lential Route	Groundwat	Component of ter Ingestion			
					-	Specific Value	ues for Soil ^{3,4}	Exposure Ro	oute Values 3,4	4		
Parameter	CAS No.	Analyte	EPA RSL Residential Soil (TR 1E-06, THQ 1) 1,2	Concentrations of Inorganic and PAH Chemicals in Background Soils (mg/kg) ^{3,4}	Maximum Allowable Concentrations of Chemical Constituents In Uncontaminated Soil (mg/kg) ^{5,6}	Ingestion 3,4	Inhalation ^{3,4}	Class I ^{3,4}	Class II ^{3,4}	IEPA ADL ^{3,4}		GHD Qualifier
Tarameter		Phenol	19000		100	23,000		100	100	ADL	< 0.21	Quanner
		Pyridine	78								< 0.82	
		1,2,4-Trichlorobenzene	24		5	780	3,200 / 920*	5	53		< 0.21	
		2,4,5-Trichlorophenol	6300		26	7,800		270	1,400		< 0.21	
		2,4,6-Trichlorophenol	49		0.66	58	200	0.2	0.77	0.66	< 0.21	
PCB		Aroclor 1016	4.1		1	1					< 0.098	
		Aroclor 1221	0.2		1	1					< 0.098	
		Aroclor 1232	0.17		1	1					< 0.098	
	53469-21-9	Aroclor 1242	0.23		1	1					< 0.098	
	12672-29-6	Aroclor 1248	0.23		1	1					< 0.098	
		Aroclor 1254	0.24		1	1					< 0.098	
		Aroclor 1260	0.24		1	1					< 0.098	
PEST		4,4′-DDD	2.3		3	3		16	80		< 0.0020	
		4,4'-DDE	2		2	2		54	270		< 0.0020	
	50-29-3	4,4'-DDT	1.9		2	2	/ 2,100*	32	160		< 0.0020	
	309-00-2	Aldrin	0.039		0.94	0.04	3	0.5	2.5	0.94	< 0.0020	
		alpha-BHC	0.086		0.0074	0.1	0.8	0.0005	0.003	0.0074	< 0.0020	
	5103-71-9	alpha-Chlordane									< 0.0020	
	319-85-7	beta-BHC	0.3								< 0.0020	
	57-74-9	Chlordane			1.8	1.8	72 / 22*	10	48		< 0.020	
	319-86-8	delta-BHC									< 0.0020	
	60-57-1	Dieldrin	0.034		0.603	0.04	1	0.004	0.02	0.603	< 0.0020	
		Endosulfan I			18	470		18	90		< 0.0020	
	33213-65-9	Endosulfan II			18	470		18	90		< 0.0020	
		Endosulfan sulfate									< 0.0020	
	72-20-8	Endrin	19		1	23		1	5		< 0.0020	
		Endrin aldehyde									< 0.0020	
		Endrin ketone									< 0.0020	
	58-89-9	gamma-BHC	0.57		0.009	0.5		0.009	0.047		< 0.0020	
		gamma-Chlordane									< 0.0020	
		Heptachlor	0.13		0.871	0.1	0.1	23	110	0.871	< 0.0020	
		Heptachlor epoxide	0.07		1.005	0.07	5	0.7	3.3	1.005	< 0.0020	
		Methoxychlor	320		160	390		160	780		< 0.0020	
	8001-35-2	Toxaphene	0.49		0.6	0.6	89	31	150		< 0.040	
		2,4,5-T	630								< 0.0041	
		2,4,5-TP (Silvex)	510		11	630		11	55		< 0.0041	
	94-75-7	2,4-D	700		1.5	780		1.5	7.7		< 0.0041	
		Dalapon	1900		0.85	2,300		0.85	8.5		< 0.041	
		Dinoseb	63		0.25	78		0.34	3.4		< 0.0083	
		Pentachlorophenol	1		0.02	3		0.03	0.14		< 0.012	
	1918-02-1	Picloram	4400		2	5,500		2	20		< 0.0083	

					Sample 1							
										ory ID :	16080104-001	
									Client Sam		Sample 1	
									Date Co	llected :	08/02/2016 11:00	
								IEPA Soil C	omponent of			
						IEPA Resid	ential Route		-			
						Specific Valu	ues for Soil ^{3,4}					
				Concentrations of Inorganic	Maximum Allowable Concentrations							
			EPA RSL Residential Soil	and PAH Chemicals in	of Chemical Constituents In					IEPA	Analytical Result	GHD
Parameter	CAS No.	Analyte	(TR 1E-06, THQ 1) ^{1,2}	Background Soils (mg/kg) 3,4		Ingestion 3,4	Inhalation ^{3,4}	Class I 3,4	Class II 3,4	ADL 3,4	(mg/kg)	Qualifier
INORG	7429-90-5	Aluminum	77000	9500							13000	· Camara
	7440-36-0	Antimony	31	4.0	5	31					6.9	J
	7440-38-2	Arsenic	0.68	13.0	13.0	13.0/11.3	750				6.8	-
		Barium	15000	110	1500	5,500	690,000				110	
		Beryllium	160	0.59	22	160	1,300				0.75	
		Cadmium	71	0.6	5.2	78	1,800				< 0.52	
		Calcium		9300							3800	
	7440-47-3	Chromium		16.2	21	230	270				18	
	7440-48-4	Cobalt	23	8.9	20	4,700					11	
	7440-50-8	Copper	3100	19.6	2900	2,900					17	
	57-12-5	Cyanide	23	0.51	40	1,600					< 0.31	
	7439-89-6	Iron	55000	15900	15900						19000	
	7439-92-1	Lead	400	36.0	107	400					22	
	7439-95-4	Magnesium		4820	325000	325,000					3400	
	7439-96-5	Manganese		636	636	1,600	69,000 / 8,700*				550	
	7439-97-6	Mercury	11	0.06	0.1	23	10 / 0.1*				< 0.022	
	7440-02-0	Nickel	1500	18.0	100	1,600	13,000				17	
	7440-09-7	Potassium		1268							1200	
	7782-49-2	Selenium	390	0.48	1.3	390					1.8	
	7440-22-4	Silver	390	0.55	4.4	390					< 1.0	
		Sodium		130							< 63	
	7440-28-0	Thallium	0.78	0.32	2.6	6.3					< 1.0	
	7440-62-2	Vanadium	390	25.2	550	550					26	
	7440-66-6	Zinc	23000	95.0	5100	23,000					54	
TCLP	7440-48-4	Cobalt						1.0	1.0		< 0.010 7	
	7439-89-6	Iron						5.0	5.0		< 0.25 7	
SPLP		Antimony						0.006	0.024		< 0.0060 7	

Notes:

< 0.040 - Result exceeds one or more criteria

-- - No criteria PAH - Polycyclic Aromatic Hydrocarbon PCB - Polychlorinated biphenyl ADL - Allowable Detection Limit

CAS No. - Chemical Abstracts Service PEST - Pesticide

EPA - United States Environmental Protection Agency RSL - Regional Screening Level

HERB - Herbicide

SPLP - Synthetic Precipitation Leaching Procedure

IEPA - Illinois Environmental Protection Agency SVOC - Semivolatile organic compound

TCLP - Toxicity Characteristic Leaching Procedure INORG - Inorganic analytes or metals

THQ - Target hazard quotients J - Estimated detected concnetration mg/kg - Milligrams per kilogram TR - Target Cancer Risk mg/L - Milligrams per liter VOC - Volatile organic compound

- 1 Analytical results compared to EPA Regional Screening Levels (RSLs) Residential Soil Generic Table (TR of 1E-06, and THQ of 1.0)
- 2 The applicable standards can be located here: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016
- 3 Analytical results compared to IEPA Title 35: Environmental Protection, Subtitle G: Waste Disposal, Chapter I: Pollution Control Board, Subchapter F: Risk Based Cleanup Objectives, Part 742: Tiered Approach to Corrective Action Objectives
- 4 The applicable standards can be located here: http://www.ipcb.state.il.us/documents/dsweb/Get/Document-38408
- 5 Analytical results compared to IEPA Summary of Maximum Allowable Concentrations of Chemical Constituents In Uncontaminated Soil Used as Fill Material At Regulated Fill Operations (35 Ill. Adm. Code 1100.Subpart F)
- 6 The applicable standards can be located here: http://www.epa.state.il.us/land/ccdd/new-max-allowable-concentrations-table.pdf
- 7 TCLP cobalt and iron and SPLP antimony analytical result units are mg/L

^{* -} Construction Worker Inhalation Objective from Appendix B, Table B 3,4

Table 2
Backfill Source Material Soil Sample Results
pH Specific Soil Component of Groundwater Ingestion Exposure Route
Sample 1

			Laboratory ID :	16080104-001	
			Client Sample ID :	Sample 1	
			Date Collected :	08/02/2016 11:00	
		Groundwater Ing Route V	l Component of gestion Exposure	pH = 6.79	
		Class I 1,2	Class II 1,2	Analytical Result	GHD
CAS No.	Analyte		6.65 to 6.89	(mg/kg)	Qualifier
7429-90-5	Aluminum			13000	
7440-36-0	Antimony	5	20	6.9*	J
7440-38-2	Arsenic	29	120	6.8	
7440-39-3	Barium	1,600	1,600	110	
7440-41-7	Beryllium	63	7,900	0.75	
7440-43-9	Cadmium	7.5	75	< 0.52	
7440-70-2	Calcium			3800	
7440-47-3	Chromium	38		18	
7440-48-4	Cobalt	See Table 1 TCLP	See Table 1 TCLP	11	
7440-50-8	Copper	130,000	130,000	17	
57-12-5	Cyanide	40	120	< 0.31	
7439-89-6	Iron	See Table 1 TCLP	See Table 1 TCLP	19000	
7439-92-1	Lead	107	1,420	22	
7439-95-4	Magnesium			3400	
7439-96-5	Manganese			550	
7439-97-6	Mercury	2.1	10	< 0.022	
7440-02-0	Nickel	130	2,600	17	
7440-09-7	Potassium			1200	
7782-49-2	Selenium	5.2	5.2	1.8	
7440-22-4	Silver	8.5		< 1.0	
7440-23-5	Sodium			< 63	
7440-28-0	Thallium	2.8	28	< 1.0	
7440-62-2	Vanadium	980		26	
7440-66-6	Zinc	6,200	12,000	54	

Notes:

*See Table 1 SPLP results for Antimony

6.9* - Result exceeds one or more criteria

-- - No criteria

CAS No. - Chemical Abstracts Service

EPA - United States Environmental Protection Agency

IEPA - Illinois Environmental Protection Agency

J - Estimated detected concnetration

mg/kg - Milligrams per kilogram RSL - Regional Screening Level

THQ - Target hazard quotients

TR - Target Cancer Risk

 1 - Analytical results compared to IEPA Title 35: Environmental Protection, Subtitle G: Waste Disposal, Chapter I: Pollution Control Board, Subchapter F: Risk Based Cleanup Objectives, Part 742: Tiered Approach to Corrective Action Objectives

2 - The applicable standards can be located here: http://www.ipcb.state.il.us/documents/dsweb/Get/Document-38408

Table 3 Backfill Source Material Soil Sample Results Sample S-040517-GW-01

		EPA RSL Residential Soil (TR 1E-06, THQ	Concentrations of Inorganic and PAH Chemicals in	Maximum Allowable Concentrations of Chemical Constituents	IEPA Residential Rou Soi	_	•	ent of Groundwater re Route Values ^{3,4}	Laboratory ID : Client Sample ID : Date Collected :	16080104-001 S-040517-GW-01 04/05/2017 08:15	-
CAS No.	Analyte	1) 1,2	Background Soils (mg/kg) ^{3,4}	In Uncontaminated Soil (mg/kg) ^{5,6}	Ingestion ^{3,4}	Inhalation ^{3,4}	Class I ^{3,4}	Class II ^{3,4}	IEPA ADL ^{3,4}	Analytical Result (mg/kg)	GHD Qualifier Units
	Alachlor	9.7		0.04	8		0.04	0.2		< 0.420	mg/kg
	Aldicarb	63		0.013	78		0.013	0.07		< 0.840	mg/kg
1912-24-9	Atrazine	2.4		0.066	2700		0.066	0.33		< 0.220	mg/kg
7440-42-8	Boron	16000		40	16000		2.0	2.0		< 24	mg/kg
71-36-3	Butanol	7800		17	7800	10000	17	17		< 6.5	mg/kg
1563-66-2	Carbofuran	320		0.22	390		0.22	1.1		< 0.840	mg/kg
16887-00-6	Chloride			4,000			200	200		16	mg/kg
96-12-8	1,2-dibromo-3-chloropropane	0.0053		0.002	0.46	11	0.002	0.02		< 0.013	mg/kg
	1,2-dibromoethane	0.036		0.005	0.32	0.06	0.0004	0.004	0.005	< 0.0064	mg/kg
145-73-3	Endothall	1300		0.4	1600		0.4	0.4		NA	mg/kg
16984-48-8	Fluoride	3100		80	4700		4.0	4.0		5.7	mg/kg
14797-55-8	Nitrate as N	130000		200	130000		10	100		22	mg/kg
7723-14-0	Phosphorous									< 0.10	mg/L
122-34-9	Simazine	4.5		0.04	390		0.04	0.37		< 0.420	mg/kg
14808-79-8	Sulfate		85.5	8,000	-		400	400		29	mg/kg
108-05-4	Vinyl Acetate	910		10	78000	1000/*10	170	170		< 0.013	R* mg/kg

Notes:

R* - Vinyl acetate result of < 0.013 mg/kg qualified by GHD as rejected due to to 0% recoveries in the MS and MSD

< 0.0064 - Result exceeds one or more criteria

--- No criteria mg/kg - Milligrams per kilogram
ADL - Allowable Detection Limit mg/L - Milligrams per liter
CAS No. - Chemical Abstracts Service RSL - Regional Screening Level
EPA - United States Environmental Protection Agency THQ - Target hazard quotients
IEPA - Illinois Environmental Protection Agency TR - Target Cancer Risk

- 1 Analytical results compared to EPA Regional Screening Levels (RSLs) Residential Soil Generic Table (TR of 1E-06, and THQ of 1.0)
- 2 The applicable standards can be located here: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016
- 3 Analytical results compared to IEPA Title 35: Environmental Protection, Subtitle G: Waste Disposal, Chapter I: Pollution Control Board, Subchapter F: Risk Based Cleanup Objectives, Part 742: Tiered Approach to Corrective Action Objectives
- 4 The applicable standards can be located here: http://www.ipcb.state.il.us/documents/dsweb/Get/Document-38408
- 5 Analytical results compared to IEPA Summary of Maximum Allowable Concentrations of Chemical Constituents In Uncontaminated Soil Used as Fill Material At Regulated Fill Operations (35 Ill. Adm. Code 1100.Subpart F)
- 6 The applicable standards can be located here: http://www.epa.state.il.us/land/ccdd/new-max-allowable-concentrations-table.pdf



August 10, 2017

Mr. Ramon Mendoza
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
Superfund Division, SE-5J
77 West Jackson Boulevard
Chicago, Illinois 60604

Subject: Technical Memo – Backfill Source #2 Sample Data Evaluation

Pilsen Soil OU2 Residential Site Chicago, Cook County, Illinois EPA Contract No.: EP-S5-13-01

EPA Technical Direction Document No.: S05-0001-1508-205

Document Tracking No.: 1973

Dear Mr. Mendoza:

At your request, the Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) reviewed backfill source soil sample data provided by GHD, the contractor for H. Kramer (the responsible party [RP]). This review is to determine if the soil is suitable for use as clean backfill and for an engineered barrier at the Pilsen Soil OU2 Residential (Pilsen OU2) site located in the Pilsen Neighborhood in Chicago, Cook County, Illinois. Data from the source sample was compared to United States Environmental Protection Agency (EPA) Regional Screening Levels (RSL) for residential soil with a target cancer risk (TR) of 1E-06 and a target hazard quotient (THQ) of 1.0 (EPA RSLs for residential soil); Title 35 of the Illinois Administrative Code (IAC) Part 742, Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Remediation Objectives; and Title 35 of the IAC Part 1100 Subpart F, Summary of Maximum Allowable Concentrations (MAC) of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations.

The backfill source material soil sample was collected from an agricultural property located southwest of the intersection of West Maple Road and Silver Cross Boulevard in Will County, New Lenox, Illinois. The backfill source material has been identified by GHD as available at this agricultural property. No sources of contamination are known or likely as the property is currently and has historically been developed for agricultural use. Flanagin LLC is the broker for the backfill source material.

Description of Sampling Activities

One soil sample was collected by Flanagin LLC from the backfill source material on February 7, 2017 at 1200 hours. This sample was labelled "Sample 1." START was not at the property when the soil sample was collected from the backfill source material. START also was not provided with information regarding the sample collection method.

The backfill source material was submitted by Flanagin LLC to STAT Analysis Corporation (STAT) to be analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC) (including polycyclic aromatic hydrocarbons [PAH]), polychlorinated biphenyls (PCB), pesticides, herbicides, metals

Mr. Ramon Mendoza August 10, 2017 Page 2

(including mercury), cyanide, Toxicity Characteristic Leaching Procedure (TCLP) metals (chromium, cobalt, iron, and selenium), pH, and percent moisture.

A sample summary table for the sampling event is presented in the table below. Analytical results for the sample are presented in Attachment 1, Table 1 and are summarized in the text below.

SAMPLE SUMMARY

Sampling Activity	Sample ID	Parameters	No. of Investigative Samples	No. of Duplicates	Total
Soil Sampling for Chemical Analysis	Sample 1	VOCs, SVOCs (including PAHs), PCBs, pesticides, herbicides, metals (including mercury), cyanide, TCLP (for chromium, cobalt, iron, selenium), pH, and percent moisture	1	0	1

Notes:

PAH Polycyclic aromatic hydrocarbon PCB Polychlorinated biphenyl SVOC Semivolatile organic compound

TCLP Toxicity Characteristic Leaching Procedure

VOC Volatile organic compound

Initial Analytical Results

Flanagin LLC collected one soil sample from the backfill source material on February 7, 2017. Following analysis of the sample by STAT, Flanagin LLC gave STAT approval to release the quality assurance/quality control (QA/QC) data from the sample analysis to GHD. A GHD Chemist reviewed the data and the QA/QC report and generated a reduced data validation memo. The data validation memo was submitted to EPA on July 24, 2017. The data validation memo was further reviewed by a START chemist on July 26, 2017. The START chemist review lead to the following changes to data qualifiers:

- Qualifier for sodium result for soil changed from <79 (milligrams per kilogram [mg/kg]) U to 79 J+.
- Qualifier for TCLP iron result for soil changed from <0.47 (milligrams per liter [mg/L]) U to 0.47.

These changes did not impact the findings outlined in this Technical Memo. The START chemist review did not result in any other changes to the results summarized in the data validation memo.

Validated analytical results for Sample 1 are presented in Attachment 1, Table 1. The laboratory analytical results were compared to the EPA RSLs for residential soil; the TACO Tier 1 remediation objectives listed in Title 35 of the IAC Part 742; and the MAC standards listed in Title 35 of the IAC Part 1100 Subpart F.

The following analytical results exceeded one or more criteria:

• The following analytes were not detected but their respective reporting limits exceed one or more criteria: acenaphthylene, benzidine, naphthalene, hexachlorobenzene, n-nitrosodi-n-propylamine, n-nitrosodimethylamine (NDMA), pentachlorophenol, silver, and thallium. However, because these analytes were not detected, these results are not considered exceedances.

Mr. Ramon Mendoza August 10, 2017 Page 3

- The following analytes were above the TACO background value for metropolitan statistical areas (MSA): aluminum, barium, beryllium, cadmium, calcium, cobalt, copper, lead, magnesium, nickel, potassium, vanadium, and zinc. However, these analyte concentrations do not exceed the EPA RSLs or the TACO Tier 1 remediation objectives. Thus, results for these analytes are not considered exceedances.
- Arsenic was detected at a concentration of 7.1 mg/kg which exceeds the EPA RSL for residential soil of 0.68 mg/kg. However, this concentration is below the TACO background soil concentration and the MAC for uncontaminated soil used as fill, both of which are 13.0 mg/kg. Thus, the arsenic concentration is not considered an exceedance.
- Chromium, iron, and selenium were detected at concentrations exceeding the TACO background soil concentrations and MAC standards. However, the MAC standards are based upon the soil to groundwater ingestion route objectives. As stated in the MAC standards: as an alternative to the subject MAC value, compliance verification may be determined by comparing soil sample TCLP extraction results for constituents to their respective TACO Class I Soil Component of the Groundwater Ingestion Exposure Route objectives. The TCLP results for chromium, iron, and selenium meet their respective TACO Class I Soil Component of the Groundwater Ingestion Exposure Route objectives. Thus, these concentrations are not considered an exceedance.

Compounds at concentrations that exceed the TACO Tier 1 Class I and II soil to groundwater ingestion exposure route remediation objectives are not considered to be of concern because the Pilsen OU2 site is located within the Pilsen Neighborhood in Chicago, Cook County, IL where groundwater is no longer in use and a Memorandum of Understanding is in place to prohibit use of groundwater for potable purposes. Thus, this potential exposure route is not a complete pathway and is deemed not to be of concern. No other VOCs, SVOCs, PCBs, pesticides, herbicides, or metals were detected in Sample 1 at concentrations exceeding EPA RSLs for residential soil; TACO Tier 1 remediation objectives in Title 35 of the IAC Part 742 TACO criteria; or MAC standards in Title 35 of the IAC Part 1100 Subpart F.

Summary

Flanagin LLC collected Sample 1 as a soil sample from the source material to be imported as backfill on February 7, 2017. Sample 1 was submitted to STAT to be analyzed for VOCs, SVOCs (including PAHs), PCBs, pesticides, herbicides, metals (including mercury), cyanide, TCLP (for chromium, cobalt, iron, and selenium), pH, and percent moisture. A GHD Chemist reviewed the data and the QA/QC report for both samples and generated reduced data validation memos. The data validation memos were further reviewed by a START chemist on July 26, 2017. The validated data were compared with EPA RSLs for residential soil; the TACO Tier 1 remediation objectives; and MAC standards. The following is a summary of the findings.

Exceedances of only the Class I and II soil to groundwater ingestion route standards were ruled out because the Pilsen OU2 site is located within the Pilsen Neighborhood in Chicago, Cook County, IL where groundwater is no longer in use and a Memorandum of Understanding is in place to prohibit use of groundwater for potable purposes. Thus, this exposure route is not a complete pathway and is deemed not to be of concern. Constituent concentrations below TACO background soil concentrations were also ruled out as exceedances.

START has the following recommendations for future backfill source material soil sample analysis:

1. The largest removal properties at the Pilsen OU2 site are approximately 125 feet by 25 feet and will be excavated to 1 foot below ground surface. Therefore, a backfill volume of approximately 115 cubic

Mr. Ramon Mendoza August 10, 2017 Page 4

yard of backfill source material will be required for one large removal property. START recommends that backfill source material soil samples be collected at a rate of at least one sample per 1,000 cubic yards. This will provide sufficient data for the limited quantity of backfill source material used to backfill the removal properties at the Pilsen OU2 site.

2. START also recommends that each additional backfill source material soil sample is analyzed for the same parameters.

The START review of the validated analytical results for the soil samples collected from the backfill source material indicates that it is acceptable for use as clean fill and an engineered barrier at the Pilsen OU2 site.

If you have any questions regarding this submittal or would like to discuss further action, please call me at (312) 201-7710.

Sincerely,

Paul Pallardy Project Manager

Attachments (1)

Table 1 Pilsen OU2- EPA RSL, IL MAC TACO, and Background Criteria Sample 1 - Backfill Source #2

						Laboratory ID :				17020187			
			EDA DOL			Client Sample II				Sample 1	1		
			EPA RSL	Concentrations	Maximum Allowable	Date Collected:				02/07/2017 12:00	1		
				_	()			3 /Soil Component	of Groundwater Ingestion		1		
			(TR 1E-06,		Chemical Constituents In								
			THQ 1)	in Background	Uncontaminated Soil		Soil (mg/kg) 3,4		te Values (mg/kg) 3,4	Analytical Result		GHD	Tetra Tech
Parameter	CAS No.	Analyte	$(mg/kg)^{1,2}$	Soils (mg/kg) 3,4		Ingestion 3,4	Inhalation 3,4	Class I 3,4	Class II 3,4	(mg/kg)	Tetra Tech Comment	Qualifier	Qualifier
VOC	67-64-1	Acetone	61000		25	70,000	100,000	25	25	< 0.097			
		Benzene	1.2		0.03	12	0.8	0.03	0.17	< 0.0065			
	75-27-4	Bromodichloromethane	0.29		0.6	10	3,000	0.6	0.6	< 0.0065			
	75-25-2	Bromoform	19		0.8	81	53	0.8	0.8	< 0.0065			
	74-83-9	Bromomethane	6.8		0.2	110	10 / 3.9*	0.2	1.2	< 0.013			
	78-93-3	2-Butanone	27000							< 0.097			
	75-15-0	Carbon disulfide	770		9	7,800	720 / 9.0*	32	160	< 0.065			
	56-23-5	Carbon tetrachloride	0.65		0.07	5	0.3	0.07	0.33	< 0.0065			
	108-90-7	Chlorobenzene	280		1	1,600	130 / 1.3*	1	6.5	< 0.0065			
	75-00-3	Chloroethane	14000							< 0.013			
	67-66-3	Chloroform	0.32		0.3	100	0.3	0.6	2.9	< 0.0065			
	74-87-3	Chloromethane	110		1					< 0.013			
	124-48-1	Dibromochloromethane	8.3		0.4	1,600	1,300	0.4	0.4	< 0.0065			
		1,1-Dichloroethane	3.6		36	7,800	1,300 / 130*	23	110	< 0.0065			
		1,2-Dichloroethane	0.46		0.02	7	0.4	0.02	0.1	< 0.0065			
		1,1-Dichloroethene	230		0.06	3,900	290 / 3.0*	0.06	0.3	< 0.0065			
		cis-1,2-Dichloroethene	160		0.4	780	1,200	0.4	1.1	< 0.0065			
		trans-1,2-Dichloroethene	1600		0.7	1,600	3,100	0.7	3.4	< 0.0065			
		1,2-Dichloropropane	0.28		0.03	9	15 / 0.50*	0.03	0.15	< 0.0065			
		cis-1,3-Dichloropropene			0.005	6.4	1.1 / 0.39*	0.004	0.02	< 0.0026			
		trans-1,3-Dichloropropene			0.005	6.4	1.1 / 0.39*	0.004	0.02	< 0.0026			
		Ethylbenzene	5.8		13	7,800	400 / 58*	13	19	< 0.0065			
		2-Hexanone	200							< 0.026			
		4-Methyl-2-pentanone	33000							< 0.026			
		Methylene chloride	57		0.02	85	13	0.02	0.2	< 0.013			
		Methyl tert-butyl ether	47		0.32	780	8,800 / 140*	0.32	0.32	< 0.0065			
		Styrene	6000		4.0	16,000	1,500 / 430*	4	18	< 0.0065			
		1,1,2,2-Tetrachloroethane	0.6							< 0.0065			
		Tetrachloroethene	24		0.06	12	11	0.06	0.3	< 0.0065			
		Toluene	4900		12	16,000	650 / 42*	12	29	< 0.0065			
		1,1,1-Trichloroethane	8100		2		1,200	2	9.6	< 0.0065			
		1,1,2-Trichloroethane	1.1		0.02	310	1,800	0.02	0.3	< 0.0065			
		Trichloroethene	0.94		0.06	58	5	0.06	0.3	< 0.0065			
		Vinyl chloride	0.059		0.01	0.46	0.28	0.01	0.07	< 0.0065			
		Xylenes, Total	580		5.6	16,000	320 / 5.6*	150	150	< 0.019			
PAH		Acenaphthene	3600	0.09	570	4,700		570	2,900	< 0.043			
		Acenaphthylene		0.03						< 0.043	Result was ND		
		Anthracene	18000	0.25	12,000	23,000		12,000	59,000	< 0.043			+
		Benz(a)anthracene	1.1	1.1	1 1	0.9		2	8	< 0.043			+
		Benzo(a)pyrene	0.11	1.3	1.3	0.09		8	82	< 0.043			+
		Benzo(b)fluoranthene	1.1	1.5	1.5	0.09		5	25	< 0.043			
		Benzo(g,h,i)perylene		0.68				<u></u>		< 0.043			+
		Benzo(k)fluoranthene	11	0.08	Q	9		49	250	< 0.043			
		Chrysene	110	1.2	88	88		160	800	< 0.043			
		Dibenz(a,h)anthracene	0.11	0.20	0.20	0.09		2	7.6	< 0.043			
			2400	2.7	3,100	3,100		4,300	21,000	< 0.043			+
		Fluoranthene											+
		Fluorene	2400	0.10	560	3,100		560	2,800	< 0.043			
		Indeno(1,2,3-cd)pyrene	1.1	0.86	1.6	0.9	170 / 1.0*	14	69	< 0.043	Danilania ND		+
		Naphthalene	3.8	0.04	1.8	1,600	170 / 1.8*	12	18	< 0.043	Result was ND		1
		Phenanthrene	1000	1.3	2 200	2 200		4.200	21.000	< 0.043			1
CMOC		Pyrene	1800	1.9	2,300	2,300		4,200	21,000	< 0.043			
		Aniline	95							< 0.43	n t ND		
		Benzidine	0.00053							< 0.43	Result was ND		
		Benzoic acid	250000		400	310,000		400	400	< 1.1			
	100-51-6	Benzyl alcohol	6300							< 0.22			

Table 1 Pilsen OU2- EPA RSL, IL MAC TACO, and Background Criteria Sample 1 - Backfill Source #2

Part		
Parameter CAS No.		
Parameter C.A.S.No.		
Parameter CAS No. Analyte Inspite 1		
Personner CAS No. Another (mg/sg) 2	GHI	GHD Tetra Te
111-9-14 862-believes(hypothalase 190		ualifier Qualifie
111444 88t2-bitecottylehere 0.23 0.66 0.6 0.2 0.0094 0.0004 0.0004 11781-7 88t2-bitecottylehenyl phenyl ether	a recir comment	uanner Quanne
1178-117 76-62-ady-have-ylight-function 39 46 46 31,000 5,600 31,000 <1,1		
101.553 4-Broungheiny planyl cher		
Sc.647 Bary beauty phthalate 290 - 930 16,000 930 930 930 <0.22		
867+8 Corbusole		
106-47-8 4-Chloroninine		
S95-97 4 Chloros-3-methylphenol 6300		
91-58-7 2-Chlorophanel 4800		
95.57.8 2-Chlorophend 390 1.5 390 53,000 4 4 6.022 7005-72-3 4-Chlorophendy phenyl their		
132-64-9 Debuzolfran 73		
95-50-1 12-Dichloradestrane 1800 17 7,000 560/310* 17 43 <0.22		
S41/3-1 1.3-10idlorobezzene		
106-46-7		
19-94-1 3.3 'Dichlorobenzidine 1.2		
120-83-2 2,4-Dirchlorophenol 190 0.48 230 1 1 < 0.22		
84-66-2 Diethyl phthalate 51000 470 63,000 2,000 470 470 < 0.22		
105-67-9		
131-11-3 Dimethyl phthalate		
S34-52-1 4.6-Dinitro-2-methylphenol 5.1		
S1-28-5 2,4-Dinitrophenol 130 3.3 160 0.2 0.2 <1.1		
121-14-2 2,4-Dinitrotoluene 1.7 0.25 0.9 0.0008 0.0008 < 0.043		
606-20-2 2,6-Dinitrotoluene 0.36 0.26 0.9 0.0007 0.0007 < 0.043 84-74-2 Di-n-butyl phthalate 6300 23300 7,800 2,300 2,300 2,300 < 0.22 117-84-0 Di-n-octyl phthalate 630 1600 1,600 10,000 10,000 10,000 0.022 118-74-1 Hexachlorobenzene 0.21 0.4 0.4 1 2 11		
84-74-2 Di-n-butyl phthalate 6300 2300 7,800 2,300 2,300 2,300 2,300 < 0.22		
117-84-0 Di-n-octyl phthalate 630 1600 1,600 10,000 10,000 10,000 0.22 118-74-1 Hexachlorobenzene 0.21 0.4 0.4 1 2 11		
118-74-1 Hexachlorobenzene 0.21 0.4 0.4 1 2 11 < 0.22 Result was ND		
87-68-3 Hexachlorobutadiene 1.2 0.22 77-47-4 Hexachlorocyclopentadiene 1.8 1.1 550 10 / 1.1* 400 2,200 < 0.22		
77-47-4 Hexachlorocyclopentadiene 1.8		
67-72-1 Hexachloroethane 1.8		
78-59-1 Isophorone 570 8 15,600 4,600 8 8 < 0.22		
91-57-6 2-Methylnaphthalene 240		
95-48-7 2-Methylphenol 3200 15 3,900 15 15 < 0.22		
106-44-5 4-Methylphenol 6300		
88-74-4 2-Nitroaniline 630 <td< td=""><td></td><td></td></td<>		
99-09-2 3-Nitroaniline		
100-01-6 4-Nitroaniline 27		
88-75-5 2-Nitrophenol < 0.22 100-02-7 4-Nitrophenol < 0.43		
100-02-7 4-Nitrophenol < 0.43		
- 1/20/20 μπανονιμέντε 3/1 1 - 1 - 1/40 3/1 1/41/4T 0/1 - 1/41/4T - 1/41/4T		
621-64-7 N-Nitrosodi-n-propylamine 0.078 0.0018 0.09 0.00005 0.00005 < 0.043 Result was ND		
62-75-9 N-Nitrosodimethylamine 0.002 < 0.22 Result was ND		
86-30-6 N-Nitrosodiphenylamine 110 1 130 1 5.6 < 0.043		
108-60-1 2, 2'-oxybis(1-Chloropropane) 3100 < 0.22		
87-86-5 Pentachlorophenol 1 0.02 3 0.03 0.14 < 0.043 Result was ND		
108-95-2 Phenol 19000 100 23,000 100 300 40.22 100 40.22 100 40.22 100 40.22 100 40.22 100 40.22 100 40.22		
110-86-1 Pyridine 78 <0.87		
120-82-1 1,2,4-Trichlorobenzene 24 5 780 3,200 / 920* 5 53 < 0.22		
95-95-4 2,4,5-Trichlorophenol 6300 26 7,800 270 1,400 < 0.22		
88-06-2 2,4,6-Trichlorophenol 49 0.66 58 200 0.2 0.77 < 0.22		
PCB 12674-11-2 Aroclor 1016 4.1 1 1 < 0.10		
11104-28-2 Aroclor 1221 0.2 1 1 1 <0.10		
11141-16-5 Aroclor 1232 0.17 1 1 1 < 0.10		
53469-21-9 Aroclor 1242 0.23 1 1 1 <0.10		
12672-29-6 Aroclor 1248 0.23 1 1 1 <0.10		

Table 1 Pilsen OU2- EPA RSL, IL MAC TACO, and Background Criteria Sample 1 - Backfill Source #2

										15000105			
						Laboratory ID:				17020187 Sample 1			
			EPA RSL		1,14,11,114,111,111,114,114,114	Client Sample ID Date Collected:	*						A = I
							al Route Specific	3 ASoil Component of	Groundwater Ingestion	02/07/2017 12:00			
			(TR 1E-06,		Chemical Constituents In		oil (mg/kg) ^{3,4}						
			THQ 1)	in Background	Uncontaminated Soil	Ingestion 3,4	Inhalation ^{3,4}	Class I 3,4	Values (mg/kg) ^{3,4} Class II ^{3,4}	Analytical Result		GHD	Tetra Tech
Parameter	CAS No.	Analyte	(mg/kg) 1,2	Soils (mg/kg) ^{3,4}	(mg/kg) ^{5,6}	Ingestion	Inhalation	Class 1	Class II	(mg/kg)	Tetra Tech Comment	Qualifier	Qualifier
		Aroclor 1254	0.24		1	1				< 0.10			 '
		Aroclor 1260	0.24		1	1				< 0.10			 '
PEST		4,4'-DDD	2.3		3	3		16	80	< 0.0021			 '
		4,4'-DDE	2		2	2		54	270	< 0.0021			<u> </u>
		4,4'-DDT	1.9		2	2	/ 2,100*	32	160	< 0.0021			 '
		Aldrin	0.039		0.94	0.04	3	0.5	2.5	< 0.0021			 '
		alpha-BHC	0.086		0.0074	0.1	0.8	0.0005	0.003	< 0.0021			 '
		alpha-Chlordane								< 0.0021			 '
		beta-BHC	0.3							< 0.0021			
		Chlordane			1.8	1.8	72 / 22*	10	48	< 0.021			 '
		delta-BHC								< 0.0021			
		Dieldrin	0.034		0.603	0.04	1	0.004	0.02	< 0.0021			
		Endosulfan I			18	470		18	90	< 0.0021			 '
		Endosulfan II			18	470		18	90	< 0.0021			 '
		Endosulfan sulfate								< 0.0021			 '
		Endrin	19		1	23		1	5	< 0.0021			 '
		Endrin aldehyde								< 0.0021			 '
		Endrin ketone								< 0.0021			 '
		gamma-BHC	0.57		0.009	0.5		0.009	0.047	< 0.0021			
		gamma-Chlordane								< 0.0021			 '
		Heptachlor	0.13		0.871	0.1	0.1	23	110	< 0.0021			 '
		Heptachlor epoxide	0.07		1.005	0.07	5	0.7	3.3	< 0.0021			 '
		Methoxychlor	320		160	390		160	780	< 0.0021			 '
		Toxaphene	0.49		0.6	0.6	89	31	150	< 0.043			 '
HERB		2,4,5-T	630							< 0.0043			 '
	_	2,4,5-TP (Silvex)	510		11	630		11	55	< 0.0043			 '
		2,4-D	700		1.5	780		1.5	7.7	< 0.0043			 '
		2,4-DB						<u></u>		< 0.0087			 '
		Dalapon	1900		0.85	2,300		0.85	8.5	< 0.043			 '
		Dicamba	1900							< 0.0087			 '
		Dichlorprop						<u></u>		< 0.0087			 '
		Dinoseb	63		0.25	78		0.34	3.4	< 0.0087			 '
		MCPA	32							< 0.0087			 '
		MCPP	63							< 0.0043			 '
		Picloram	4400		2	5,500		2	20	< 0.0087			<u> </u>
INORG	7429-90-5	Aluminum	77000	9500						17000	Above background but below applicable standards		 '
		Antimony	31	4.0	5	31				<2.2			 '
		Arsenic	0.68	13.0	13.0	13.0/11.3	750				Below background		
		Barium	15000	110	1500	5,500	690,000			170	Above background but below applicable standards		
		Beryllium	160	0.59	22	160	1,300			0.92	Above background but below applicable standards		
		Cadmium	71	0.6	5.2	78	1,800			0.73	Above background but below applicable standards		
	7440-70-2	Calcium		9300						14000	Above background but below applicable standards		
											Above background and MAC but MAC is based on soil to		
											gw ingestion route. TCLP chromium result meets the		
											TACO Tier 1 Class I soil to groundwater ingestion		
	7440-47-3	Chromium		16.2	21	230	270			22	exposure route remediation objectives.		
	7440-48-4	Cobalt	23	8.9	20	4,700				9.3	Above background but below applicable standards		
		Copper	3100	19.6	2900	2,900				29	Above background but below applicable standards		
		Cyanide	23	0.51	40	1,600				< 0.33	- 11		
				0.02		-,				7.00	Above background and MAC but MAC is based on soil to		
											gw ingestion route. TCLP iron result meets the TACO		
											Tier 1 Class I soil to groundwater ingestion exposure route		1
	7439-89-6	Iron	55000	15900	15900					23000	remediation objectives.		
		Lead	400	36.0	107	400				38	Above background but below applicable standards		—
		Magnesium		4820	325000	325,000				8900	Above background but below applicable standards Above background but below applicable standards		+
		Manganese		636	636	1,600	69,000 / 8,700*			430	12010 odenground out octow applicable standards		+
		Mercury	11	0.06	0.1	23	10 / 0.1*			0.044			
		Nickel	1500	18.0	100	1,600	13,000			27	Above background but below applicable standards		
———		Potassium		1268		-				2800	Above background but below applicable standards Above background but below applicable standards		+
	/ 111 U-U9- /	1 0(48814111		1200						4000	Above background but below applicable standards		<u> </u>

Table 1 Pilsen OU2- EPA RSL, IL MAC TACO, and Background Criteria Sample 1 - Backfill Source #2

						Laboratory ID :				17020187			
			EPA RSL	Concentrations	Maximum Allowable	Client Sample ID	:			Sample 1			A
										02/07/2017 12:00			A
			(TR 1E-06,		Chemical Constituents In		al Route Specific	3,4Soil Component of	Groundwater Ingestion				A
			THQ 1)	in Background	Uncontaminated Soil	Values for So	oil (mg/kg) ^{3,4}	Exposure Route V	Values (mg/kg) 3,4	Analytical Result		GHD	Tetra Tech
Parameter	CAS No.	Analyte		Soils (mg/kg) ^{3,4}		Ingestion 3,4			Class II 3,4	(mg/kg)	Tetra Tech Comment		Qualifier
											Above background and MAC but MAC is based on non-		
											applicable soil to gw ingestion route. TCLP selenium		
											result meets the TACO Tier 1 Class I soil to groundwater		
	7782-49-2	Selenium	390	0.48	1.3	390			-	3.2	ingestion exposure route remediation objectives.		
	7440-22-4	Silver	390	0.55	4.4	390				< 1.1	Result was ND		
	7440-23-5	Sodium		130					-	79			J+
	7440-28-0	Thallium	0.78	0.32	2.6	6.3				< 1.1	Result was ND		
	7440-62-2	Vanadium	390	25.2	550	550				32	Above background but below applicable standards		
	7440-66-6	Zinc	23000	95.0	5100	23,000				100	Above background but below applicable standards		
TCLP 7	7440-47-3	Chromium						0.1	1.0	< 0.010			
	7440-48-4	Cobalt						1.0	1.0	< 0.010			
		Iron						5.0	5.0	0.47		U	
	7782-49-2	Selenium						0.05	0.05	< 0.010			
pH (25 deg C)		рН								7.15		J	J
Percent Moisture		Percent Moisture								23.3			

Notes:

* - Construction Worker Inhalation Objective from Appendix B, Table B ^{3,4}

< 0.043 - Analyte was not detected but the reporting limit is above one or more applicable standards
 17000 - Analyte was detected and result exceeds TACO background soil concentrations but the concentration does not exceed the EPA RSLs or the TACO Tier 1 remediation objectives
 7.1 - Analyte was detected but result is below TACO background soil concentrations

- Analyte was detected and result exceeds TACO background soil concentrations and MAC but TCLP result for analyte meets the TACO Tier 1 Class I soil to groundwater ingestion exposure route remediation objectives.

-- - No criteria

22

ADL - Allowable Detection Limit
CAS No. - Chemical Abstracts Service

EPA - United States Environmental Protection Agency

HERB - Herbicide

IEPA - Illinois Environmental Protection Agency
(J) - The analyte was positively identified: the associated

(J) - The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample

(J+) - The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

INORG - Inorganic analytes or metals MAC - Maximum Allowable Concentrations mg/kg - Milligrams per kilogram

mg/L - Milligrams per liter

ND - Not Detected

PAH - Polycyclic Aromatic Hydrocarbon

PCB - Polychlorinated biphenyl

PEST - Pesticide

U - Analyte not detected at the associated reporting limit

RSL - Regional Screening Level

SVOC - Semivolatile organic compound

TACO - Tiered Approach to Corrective Action
TCLP - Toxicity Characteristic Leaching Procedure

THQ - Target hazard quotients
TR - Target Cancer Risk

VOC - Volatile organic compound

- 1 Analytical results compared to EPA Regional Screening Levels (RSLs) Residential Soil Generic Table (TR of 1E-06, and THQ of 1.0)
- 2 The applicable standards can be located here: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017
- 3 Analytical results compared to IEPA Title 35: Environmental Protection, Subtitle G: Waste Disposal, Chapter I: Pollution Control Board, Subchapter F: Risk Based Cleanup Objectives, Part 742: Tiered Approach to Corrective Action Objectives
- $4-The\ applicable\ standards\ can\ be\ located\ here:\ http://www.ipcb.state.il.us/documents/dsweb/Get/Document-38408$
- 5 Analytical results compared to IEPA Summary of Maximum Allowable Concentrations of Chemical Constituents In Uncontaminated Soil Used as Fill Material At Regulated Fill Operations (35 Ill. Adm. Code 1100.Subpart F)
- 6 The applicable standards can be located here: http://www.epa.state.il.us/land/ccdd/new-max-allowable-concentrations-table.pdf
- 7 TCLP chromium, cobalt, iron, and selenium analytical result units are mg/L compared to Soil Component of Groundwater Ingestion Exposure Route Values in mg/L

Appendix K Clean Backfill Shipments

SOIL REMEDIATION & EXCAVATION

DATE	8/29/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
1000		-	

Starting Time	
Quitting Time	
Hours	

2812 signed Baland. Mr.

SOIL REMEDIATION & EXCAVATION

DATE	9/7/17
TO	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	Ξ
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2806	signed	Barbara J. Molini
------	--------	-------------------

SOIL REMEDIATION & EXCAVATION

DATE	9/8/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2807	signed	Barbara	1 Tholina
			7

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	9/14/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

-	DESCRIPTION	
yards		
ton	Black Dirt	
rental		
truck		
backhoe		
loader		
-		
	ton rental truck backhoe	yards ton Black Dirt rental truck backhoe

Starting Time	
Quitting Time	
Hours	

2813 signed Barba I. Mac.

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	9/20/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2808 signed Boubara I. Molina

SOIL REMEDIATION & EXCAVATION

DATE	9/22/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		_
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
99			
			_

Starting Time	
Quitting Time	
Hours	

2809 signed	Barbara I. Wholi
--------------------	------------------

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	9/26/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2810

signed

Barbara I. Wholi

SOIL REMEDIATION & EXCAVATION

DATE	9/27/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
	-		

Starting Time	
Quitting Time	
Hours	

2811 signed	Barbara S. Phol.
--------------------	------------------

SOIL REMEDIATION & EXCAVATION

DATE	4/13/18
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2832	signed	Borbara Mol.	
------	--------	--------------	--

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	4/20/18
TO	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2833 signed Barbara Molina

SOIL REMEDIATION & EXCAVATION

DATE	4/24/18
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

Bonban Mol-

SOIL REMEDIATION & EXCAVATION

DATE	4/27/18	
ТО	GHD	
JOB	Throop & Cermak, Chicago	
DRIVER	DisposAll	

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2000 signed Darbana 8 hol	2835	signed	Barban Wholi
---------------------------	------	--------	--------------

SOIL REMEDIATION & EXCAVATION

DATE	7/31/17	
TO	GHD	
JOB	Throop & Cermak, Chicago	
DRIVER	DisposAll	

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2800 signed	Barbara Moli
-------------	--------------

SOIL REMEDIATION & EXCAVATION

DATE	8/1/17	
ТО	GHD	
JOB	Throop & Cermak, Chicago	
DRIVER	DisposAll	

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2804	signed	Barbara I Mal.
------	--------	----------------

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	8/2/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
40	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
			_

Starting Time	
Quitting Time	
Hours	

2805 signed Barbara J. Thel

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	8/15/17	
ТО	GHD	
JOB	Throop & Cermak, Chicago	
DRIVER	ER DisposAll	

QTY		DESCRIPTION
	yards	
40	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2801 signed Barbarn Moli

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	8/24/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
	1		

Starting Time	
Quitting Time	
Hours	

2802

signed

Barbara Moli

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	8/25/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
			-
		1	

Starting Time	
Quitting Time	
Hours	

2803

signed Bubara Mol-

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

TO	GHD	
JOB	Throop & Cermak, Chicago	
DRIVER	DisposAll	

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2829 signed Barbara I Mal

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	12/19/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

	DESCRIPTION	
yards		
ton	Black Dirt	
rental		
truck		
backhoe		
loader		
	ton rental truck backhoe	yards ton Black Dirt rental truck backhoe

Starting Time	
Quitting Time	
Hours	

2830 signed Boulara I. Mol.

SOIL REMEDIATION & EXCAVATION

TO	7/2/18 GHD		
JOB	Throop & Cermak, Chicago		
DRIVER	RWC		

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2851 s	igned Z	arban)	Twe	_
---------------	---------	---------	-----	---

SOIL REMEDIATION & EXCAVATION

loage
isage
icago

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	
	+	

Starting Time	
Quitting Time	
Hours	

2852 s	signed B	Sarbara V.	When
---------------	----------	------------	------

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	7/11/18		
TO	GHD		
JOB	Throop & Cermak, Chicago		
DRIVER	DisposAll		

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt – roll off box
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2853 signed Barbara Moline

SOIL REMEDIATION & EXCAVATION

TO	7/2/18 GHD		
JOB	Throop & Cermak, Chicago		
DRIVER	RWC		

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2851 s	igned Z	arban)	Twe	_
---------------	---------	---------	-----	---

SOIL REMEDIATION & EXCAVATION

loage
isage
icago

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	
	+	

Starting Time	
Quitting Time	
Hours	

2852 s	signed B	Sarbara V.	When
---------------	----------	------------	------

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	7/11/18		
TO	GHD		
JOB	Throop & Cermak, Chicago		
DRIVER	DisposAll		

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt – roll off box
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2853 signed Barbara Moline

(312) 767	RW COLLINS Co.
10	7225 W. 66th Street • Chicago, Illinois 60638 Date 7/5/17
Job	Throop + Cermak, Chicago
Truck No	Transaction
	YDS.
20	TON BLACK DIRT
	RENTAL:
	TRUCK
	ВАСКНОЕ
	LOADER
STARTING	TIME
QUITTING	

2786

HOURS

Signed Barbara Mal

(3	1	2)	7	6	7	-	3	0	3	0

(708) 458-6868

RW COLLINS Co.

uck No.	throop + Cermak, Chicago Driver Disposful
	YDS.
20	TON Black Dirt
	RENTAL:
	TRUCK
	BACKHOE
	LOADER
TA DTINIO	TIME

2787

Signed Sarba Mol

1	31	21	7	67	1-3	0	3	C

(708) 458-6868

RW COLLINS Co.

	YDS.
20	TON Black Dist
	RENTAL:
	TRUCK
	BACKHOE
	LOADER
TARTING	TIME
UITTING '	TIME

2788

Signed Barbare That

To GHD Job Throop	COLLINS Co. 6th Street • Chicago, Illinois 60638 Date 7/19/17 + Cernal, Chicago
To GHD Job Throop	Date 7/19/17 + Cernal, Chicago
Job throop	+ Cernal, Chicago
Job Throop	+ Cernal, Chicago
Total No.	100
Truck No [Driver Disposall
YDS.	N
20 TON 6	Black Nert
RENTAL:	
TRUCK	
BACKHOE	
LOADER	
STARTING TIME	
QUITTING TIME	

2789

Signed Pouba a Mel

(31	21	7	67	-3	0	3	0

(708) 458-6868

RW COLLINS Co.

7225 W. 66th Street • Chicago, Illinois 60638

To	Date 7/21/17 hroop + Cermak Chicago Driver Disposall
20	YDS. TON Black Dirt RENTAL:
	TRUCK BACKHOE
	LOADER
	TIMETIME

2790

Signed Barbar Mal

SOIL REMEDIATION & EXCAVATION

TO	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt – Roll Off Box
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2843 signed	Barbara	Mol	
--------------------	---------	-----	--

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	6/6/18
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt – Roll Off Box
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2844

signed

Barbara Moli

SOIL REMEDIATION & EXCAVATION

D
oop & Cermak, Chicago
posAll
-

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt – Roll Off Box
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2845	signed	Barbara Molina

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

D				
oop & Cerm	ak, Chica	ago		
posAll				
_	roop & Cerm sposAll		roop & Cermak, Chicago sposAll	

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt – Roll Off Box
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2846

signed

Barbara I. Moli

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	6/20/18
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
	ton	
	rental	
6	truck	Black Dirt – 6-wheeler Load
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2848 signed Earbara Molina

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

6/25/18
GHD
Throop & Cermak, Chicago
Eno
Liio

QTY		DESCRIPTION
	yards	
	ton	
	rental	
12	truck	Black Dirt – 6-wheeler Load
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2849 signed Barbara Molenn

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	11/6/17
TO	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY	4	DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2823 signed Barbara I. Mali

SOIL REMEDIATION & EXCAVATION

DATE	11/8/17
TO	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		_
40	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
			-

Starting Time	
Quitting Time	
Hours	

2824	signed	Barbara I. Whole	
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SOIL REMEDIATION & EXCAVATION

DATE	11/14/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	
	1	
	1	

Starting Time	
Quitting Time	
Hours	

2825	signed	Barbara I Mali	
------	--------	----------------	--

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	11/22/17		
TO	GHD		
JOB	Throop & Cermak, Chicago		
DRIVER DisposAII			

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2826 signed Barbara J. Moli

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	11/29/17			
TO	GHD			
JOB	Throop & Cermak, Chicago			
DRIVER DisposAII				

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2827

signed

Barbara J. Mol.

SOIL REMEDIATION & EXCAVATION

DATE	12/1/17		
ТО	GHD		
JOB	Throop & Cermak, Chicago		
DRIVER DisposAll			

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2828	signed	Barbara I. Mol.
------	--------	-----------------

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	10/5/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2814

signed

Barbara J. Moline

SOIL REMEDIATION & EXCAVATION

DATE	10/5/17
TO	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
-	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2815	signed	Barbara J. Mohi	
------	--------	-----------------	--

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	10/10/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		-
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2816 signed Barbara I. Molini

SOIL REMEDIATION & EXCAVATION

GHD
Throop & Cermak, Chicago
DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2817 signed	Barbara I. Moli
--------------------	-----------------

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	10/16/17		
TO	GHD		
JOB	Throop & Cermak, Chicago		
DRIVER DisposAll			

QTY		DESCRIPTION
	yards	
40	ton	Black Dirt
	rental	
	truck	
4000	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2818 signed Barbara I. Molim

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

)		
GHD		
Throop & Cermak, Chicago		
oosAll		
-	roop & Cermak, Chicago sposAll	

	DESCRIPTION
yards	
ton	Black Dirt
rental	
truck	
backhoe	
loader	
	ton rental truck backhoe

Starting Time	
Quitting Time	
Hours	

2819 signed Barbara Moli

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	10/20/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		
			_

Starting Time	
Quitting Time	
Hours	

2820 signed Barbara J. Mol.

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	10/31/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION	
	yards		
20	ton	Black Dirt	
	rental		
	truck		
	backhoe		
	loader		

Starting Time	
Quitting Time	
Hours	

2821 signed Barbara & Mol.

SOIL REMEDIATION & EXCAVATION

7225 West 66th Street, Chicago, Illinois 60638

DATE	11/2/17
ТО	GHD
JOB	Throop & Cermak, Chicago
DRIVER	DisposAll

QTY		DESCRIPTION
	yards	
20	ton	Black Dirt
	rental	
	truck	
	backhoe	
	loader	

Starting Time	
Quitting Time	
Hours	

2822 signed Barbara I. Wal.

(312) 767	RW Collins C_O .
	7225 W. 66th Street • Chicago, Illinois 60638 Date 6/14/17
,	
то	AHD
Job	throop + Cernak, Chicago
Truck No.	Hroop + Cernak, Chicago Driver Dispos ALL
1145111101	Divoi
110	YDS.
40	TON Black Dist.
	RENTAL:
	TRUCK
	BACKHOE
	LOADER
STARTING	TIME
QUITTING	
HOURS	

2781

Signed Barbar Thol.

(31	2	767-3030)

(708) 458-6868

RW COLLINS Co.

To	
Truck No	HROOP + CERMAK, CHICAGO Driver Di SPOS ALL
	YDS.
20	TON BLACK DIRT
	RENTAL:
	TRUCK
	BACKHOE
	LOADER
QUITTING	TIMETIME
782	Signed Bark Mul-

	RW Collins C_{O} .
	7225 W. 66th Street • Chicago, Illinois 60638
	Date _ 6/2/
То	GHD
Job	THROOP + CERMAK, CHICAGO
Truck No	DCC000111
	YDS.
20	TON BLACK DIRT
	RENTAL:
	TRUCK
	ВАСКНОЕ
	LOADER

2784

HOURS

Signed Bark Mol-

(31	2	767-3030	

(708) 458-6868

RW COLLINS Co.

7225 W. 66th Street • Chicago, Illinois 60638

	DOP + CERMAK CHICAGO Driver DISPOSIALL
	BLACK DIRT
	JCK CKHOE
STARTING TIME	

2783

Signed Park Mal

(312) 767	-3030 (708) 458-6868
	RW COLLINS Co.
	7225 W. 66th Street • Chicago, Illinois 60638
	Date 6/28
	-
To G.	HD
	Proop + Cermak, Chicago Driver Dispos ALL
JOD	Tiseos Au
Truck No	Driver DI Stos ALL
	YDS.
20	TON Black Dirt
	RENTAL:
	TRUCK
	BACKHOE
	LOADER
STARTING	TIME
QUITTING	TIME
HOURS	
HOUNS	
2785	Signed South Mal
2100	Signed South Ma

(010) 707	7000
(312) 767	
	RW COLLINS Co.
	7225 W. 66th Street • Chicago, Illinois 60638
	Date 5/15/17
To	HD and a second
Job =	31 Throop + Cermak Chicago
Truck No	31. Throop + Cermak, Chicago 77 Driver Valenti
	YDS.
20	TON BLACK DIRT
	RENTAL:
	38 9 13 9 1 3
	TRUCK
	BACKHOE
	LOADER
STARTING	TIME
QUITTING	TIME
HOURS_	

2775

Signed Bark Mol

(312) 767-3	RW COLLINS Co. 7225 W. 66th Street • Chicago, Illinois 60638 Date 5/17/17
To GH Job Truck No.	,
20	YDS. TON PULVERIZED D'RT RENTAL:
	TRUCK BACKHOE LOADER
	G TIME

ì	121	21	767-	30	30
١	01	6	101.	-00	JU

RW Collins Co.

o	HROOP + CERMAK, CHICAGO 77 Driver_ VALENTI
20	YDS. TON PULVERIZED DIRT RENTAL:
	TRUCK
	BACKHOE
TARTING	G TIME
HITTING	TIME

2773

Signed Bash Mol

(312) 101-303	(312)	767-303
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(708) 458-6868

RW COLLINS Co.

b T	GHD HROOP + CERMAK, CHICAGO 77 Driver VALENTI
	VDC
20	TON PUVERIZED DIRT
<i>S</i> U_	RENTAL:
	TRUCK
	ВАСКНОЕ
	LOADER
TARTIN	G TIME

2772

Signed Bout Mal